

# Experimental Sonic Boom Measurements on a Mach 1.6 Cruise Low-Boom Configuration

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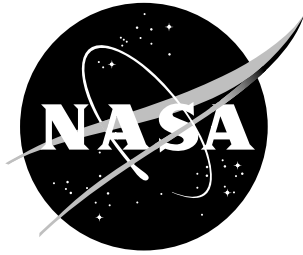
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## Summary

A wind tunnel test has been conducted by Gulfstream Aerospace Corporation (GAC) to measure the sonic boom pressure signature of a low boom Mach 1.6 cruise business jet in the Langley Unitary Plan Wind Tunnel at Mach numbers 1.60 and 1.80. Through a cooperative agreement between GAC and the National Aeronautics and Space Administration (NASA), GAC provided NASA access to some of the experimental data. NASA is publishing these data in an effort to supply experimental data for a low sonic boom configuration to the sonic boom research community. Sonic boom pressure signatures were acquired at three separation distances (0.5, 1.2, and 1.7 reference body lengths) and three angles of attack ( $-0.26^\circ$ ,  $0.26^\circ$ , and  $0.68^\circ$ ). Both on-track and off-track pressure signatures were acquired, however, only selected on-track data are plotted to illustrate salient features of the data. Tabulated sonic boom pressure data and schlieren images are provided.

## Introduction

One of the factors that prevents supersonic flight over land is the sonic boom generated from aircraft. Although sonic boom research has been conducted for many decades, it is still extremely difficult to design aircraft with low sonic boom signatures that would be acceptable for over land flight. The Gulfstream Aerospace Corporation (GAC) designed, built, and wind tunnel tested a low sonic boom Mach 1.6 cruise business jet aircraft (see references 1 and 2). Through a cooperative agreement between GAC and the National Aeronautics and Space Administration (NASA), GAC provided access to some of the experimental data. NASA is publishing these data in an effort to supply experimental data for a low sonic boom configuration to the sonic boom research community.

The purpose of this report is to document the results of the wind tunnel test conducted by GAC to measure the sonic boom characteristics of a low boom business jet configuration at Mach numbers of 1.60 and 1.80. The model was supported by a blade sting instead of a traditional sting to minimize the effect of the sting on the sonic boom measurements of the aftbody. The wind tunnel test was conducted in the Langley Unitary Plan Wind Tunnel (UPWT) at a free-stream unit Reynolds number of 3.5 million per foot. On-track and off-track sonic boom pressure signatures were acquired at three separation distances (0.5, 1.2, and 1.7 reference body lengths) and three angles of attack ( $-0.26^\circ$ ,  $0.26^\circ$ , and  $0.68^\circ$ ). Only selected data are plotted to illustrate salient features of the data, however, all the data are tabulated.

Additional testing of the GAC sonic boom model was conducted at the Ames Research Center and is described in reference 3. Results of computational fluid dynamics (CFD) studies on the sonic boom model are presented in reference 4. In addition, GAC conducted a performance test on a larger scale model of this same configuration from subsonic through supersonic conditions as described in reference 5.

## Nomenclature

|       |   |
|-------|---|
| $c$   | reference chord, 2.1029 in.   |
| $C_m$ | pitching moment coefficient, $PM/(qSc)$   |
| $C_N$ | normal force coefficient, $NF/(qS)$   |
| GAC   | Gulfstream Aerospace Corporation  |
| $h$   | distance from model nose to on-track (centerline) survey probe measured perpendicular to tunnel sidewall (see figure 4a), in. |
| $L$   | reference model length (13.20 in.)  |
| $M$   | Mach number   |

|                            |   |
|----------------------------|---|
| NF                         | normal force, lbf   |
| $p$                        | free-stream static pressure, psfa   |
| PM                         | pitching moment (see figure 7 for moment reference center location), in·lbf   |
| $p_{ref}$                  | measured reference probe pressure, psia   |
| $p_0$                      | free-stream stagnation pressure, psfa   |
| $q$                        | free-stream dynamic pressure, psfa  |
| $Re$                       | free-stream unit Reynolds number, million per ft  |
| $S$                        | reference area, 0.060 ft <sup>2</sup>   |
| $t$                        | time, min.  |
| $T_0$                      | free-stream stagnation temperature, °F  |
| $x$                        | longitudinal distance from center pair of four orifices in survey probe to model nose measured parallel to tunnel sidewall (see figure 4a), in. |
| $x_{sppos}$                | longitudinal distance from sidewall door leading edge to survey probes (see figure 4b), in.   |
| $\alpha$                   | angle of attack, deg  |
| $\beta$                    | $\sqrt{M^2 - 1}$  |
| $(\Delta p/p_{ref})_{avg}$ | average sonic boom pressure signature parameter for first five data points in a run   |
| $(\Delta p/p_{ref})_{cor}$ | corrected sonic boom pressure signature parameter   |
| $(\Delta p/p_{ref})_{unc}$ | uncorrected sonic boom pressure signature parameter   |
| $\Delta p$                 | measured differential pressure between survey probe and reference probe, psia   |
| $\phi$                     | model roll angle, deg (0° = wings horizontal, positive right wing down)   |

## Apparatus and Experimental Methods

### Model Description

The model was a 1 percent scale business jet configuration that was designed to produce a low sonic boom at a cruise Mach number of 1.6. The model was designed by Gulfstream Aerospace Corporation. Figure 1 shows a photograph of the model, an isometric sketch, and a sketch with some basic overall model dimensions. The model had a highly swept wing with a curved leading edge and sharp wing tips. The vertical tail had a bullet shaped closure that extended downstream of the tail trailing edge at the tip of the tail. The model did not have a horizontal tail. A unique feature of the configuration was the four section segmented nose with each section having a slightly larger diameter than the previous segment. Details of the model nose are shown in figure 2. The configuration was mounted to a blade sting that was attached to the upper surface of the model near the model mid-length just forward of the vertical tail. The end of the blade sting was instrumented with strain gages to measure the normal force and pitching moment on the model. Further information about the model instrumentation is provided in the Instrumentation and Measurements section.

Boundary layer transition grit was not applied to the model for most of the sonic boom pressure signature runs. However, for the limited runs conducted using boundary layer transition grit, further information about the boundary layer transition grit is provided in the Discussion section.

## Wind-Tunnel Description

The wind tunnel test was conducted in the Langley Unitary Plan Wind Tunnel (UPWT) which is a continuous flow, variable pressure supersonic wind tunnel. The tunnel contains two test sections which are approximately 4 ft square and 7 ft long. Each test section covers only part of the Mach number range of the tunnel. The nozzle ahead of each test section consists of an asymmetric sliding block which allows continuous Mach number variation during tunnel operations from 1.5 to 2.9 in the low Mach number test section (#1) and 2.3 to 4.6 in the high Mach number test section (#2). A complete description of the facility along with test section calibration information is contained in reference 6.

The nominal free-stream conditions used during this test in test section #1 are shown below.

| $M$  | $Re \times 10^{-6}$ , per foot | $p_0$ , psfa | $T_0$ , degF | $q$ , psfa | $p$ , psfa |
|------|--------------------------------|--------------|--------------|------------|------------|
| 1.60 | 3.5                            | 1888         | 125          | 795.9      | 444.1      |
| 1.80 | 3.5                            | 2020         | 125          | 797.2      | 351.5      |

The tunnel air dew point was maintained below  $-20^\circ\text{F}$  (at atmospheric pressure) to minimize water vapor condensation effects.

## Model Installation

Shown in figures 3 and 4 are photographs and sketches of the model installation. The wind tunnel test section has two sidewall doors measuring approximately 69 in. long and 48 in. tall that normally contain schlieren windows. For sonic boom testing, one of the test section doors was removed and replaced with a solid steel door so that the reference and survey probes could be attached to the tunnel sidewall. The reference probe was mounted above and slightly forward of the survey probes so that it would remain in the free-stream flow at all times during the sonic boom pressure signature data acquisition.

Three survey probes were mounted in a probe holder so that one on-track (centerline) and two off-track pressure signatures were measured. The survey probes were attached to a mechanism that permitted the probes to be moved longitudinally in the test section while the tunnel was in operation. The purpose of the mechanism was to move the survey probes downstream when either the model  $h/L$  (model nose to survey probe separation distance parameter) or Mach number increased so that the survey probes would be able to measure the pressure signature as the model shocks moved further downstream. The mechanism prevented having to shut the tunnel down to physically move the probes or install a longer sting. The total axial movement of the survey probes was approximately 6 in. The position of the survey probes remained fixed during each sonic boom pressure signature run.

Shown in figure 5 are details of the reference and survey probes (all four probes were identical). The probes were  $2^\circ$  included angle cones with four pressure orifices located approximately 1.9 in. aft of the probe tip. All four orifices were 0.013 in. in diameter and were connected to a common chamber. Two of the orifices were located  $180^\circ$  apart at the same longitudinal station and the other two orifices were located forward and aft of these orifices.

The survey probes were mounted in a probe holder that held all three probes as shown previously in figures 3 and 4. Shown in figure 6 is the orientation of the four pressure orifices in each survey probe. Orifice 1 (farthest upstream) was always oriented toward the model for all three probes. The off-track survey probes 1 and 3 were rotated  $15^\circ$  and  $30^\circ$ , respectively, so that at a separation distance of 11 in., the orifices on survey probes 1 and 3 would be at the same orientation relative to the model as the orifices on the on-track (centerline) survey probe 2.

As mentioned previously, the model was mounted to a blade sting that attached to the top of the fuselage just forward of the vertical tail (see figure 4a). The end of the blade sting was cylindrical and fit into a cylindrical bore in an angle of attack mechanism that was specially built for sonic boom testing. The sonic boom angle of attack mechanism is completely independent of the tunnel angle of attack system. The sting was held by two set screws which pressed against two flats machined into the sting; these set screws were used to level the model wing tips relative to the sonic boom angle of attack mechanism. The sonic boom angle of attack mechanism was attached to a short sting which was in turn attached to a roll coupling, which was attached to the tunnel model support system. The model was tested with the wings vertical ( $\phi = -90^\circ$ ) for all of the sonic boom pressure signature runs.

The tunnel model support system has the capability to move the model approximately 36 in. longitudinally and approximately 32 in. laterally in the test section. The tunnel model support system angle of attack mechanism was not used to set the model angle of attack and remained fixed at zero degrees during this test. The sonic boom angle of attack mechanism was used to vary model angle of attack.

A typical sonic boom pressure signature run consisted of first adjusting the sonic boom angle of attack mechanism so that a given normal force was obtained on the model. Using the tunnel model support system, the model nose was laterally positioned a specified distance,  $h$  (see figure 4a), from the on-track (centerline) survey probe. Initially, the model was located so that the nose shock was downstream of the survey probes. The model was then moved forward in 0.125 in. increments while the model pressure signature data were obtained from the reference and survey static pressure probes. As the model was moved forward during the run, the model normal force would vary because of flow gradients within the test section. During a run, the model angle of attack was not adjusted to account for the changing normal force on the model because it would have significantly increased the time required to complete a run. Typical run times were on the order of 55 minutes. Data were acquired in a move/pause mode of operation. For each pressure signature run, the model was moved approximately 24 in.

## Instrumentation and Measurements

The model normal force and pitching moment were measured with a strain gage balance that was built into the end of the blade sting as shown in figure 7. The balance normal force and pitching moment measurement ranges are shown in table 1. Also shown in the table are the computed balance accuracies as a percent of the full scale balance ranges based on the data obtained during the balance calibration. To compute the balance accuracy, the data acquired during the balance calibration was run through the balance calibration equations. The standard deviation of the difference between the computed and applied loads was determined for all of the calibration loads. The balance accuracy reported in table 1 is twice the computed standard deviation.

Table 1. Range and accuracy of balance components.

| Component       | Range              | Accuracy                         |
|-----------------|--------------------|----------------------------------|
| Normal force    | $\pm 20$ lbf       | $\pm 0.18$ percent of full scale |
| Pitching moment | $\pm 410.4$ in·lbf | $\pm 0.09$ percent of full scale |

Platinum resistance temperature detectors were attached to the balance near each bridge loca-



tion so that the balance temperature gradients could be monitored. The temperature measurements were not used to adjust the balance sensitivities.

Shown in figure 8 is a sketch showing the pressure transducer connections to the survey and reference probes. The survey probe pressures were measured with  $\pm 0.09$  psid ( $\pm 2.5$  in. water column) differential pressure transducers. The reference probe pressure was used as the reference for all of the survey probes. Bypass valves were installed in the system to allow the pressure across the differential pressure transducers to be equalized during tunnel startup and shutdown so that the transducers would not be damaged as the tunnel normal shock passed through the test section. The quoted accuracy of the differential pressure transducers was  $\pm 0.14$  percent of full scale. The reference probe pressure was measured independently with a 5 psia pressure transducer that had a quoted accuracy of  $\pm 0.1$  percent of full scale. All of the pressure transducers were located outside of the tunnel as indicated by the dashed line in the figure.

As discussed in the Model Installation section, the model was mounted to the tunnel model support system, which has the capability to move the model both longitudinally and laterally in the test section and was used to position the model relative to the on-track (centerline) survey probe. The position of the model support system was measured with absolute encoders that were mounted on the model support system drive screws. The estimated accuracy of the model support system position based on calibration data is  $\pm 0.005$  in. and  $\pm 0.003$  in. for the longitudinal and lateral positions, respectively.

The sonic boom angle of attack mechanism was used to adjust the model angle of attack for each pressure signature run as described previously in the Model Installation section. The angle of attack reading was measured with a linear potentiometer inside the mechanism. The potentiometer was calibrated in situ using an accelerometer based angle measuring system. A linear least squares curve fit was computed from the calibration data. The standard deviation of the difference between the calibration angles and the potentiometer curve fit was  $0.047^\circ$ . The sonic boom angle of attack mechanism did have some noticeable play in the system such that a person could grab the sting and apply a moment that caused the sting to move but the potentiometer output would not change. It is the play in the system that is the most likely cause for the large standard deviation of the difference between the calibration angles and the potentiometer curve fit.

The tunnel free-stream stagnation pressure was measured with a 100 psia bourdon tube pressure transducer and the free-stream stagnation temperature was measured with a 4-wire platinum resistor-temperature detector.

Data were acquired at 30 frames/second over a 2 second period. All 60 frames of data were averaged to provide a single data point.

## Corrections

The model angle of attack has been corrected for sting deflections caused by aerodynamic loads. In addition, the computed distance,  $h$ , between the on-track (centerline) survey probe and the model nose has been corrected for sting deflections caused by aerodynamic loads.

Because of static pressure variation within the tunnel test section, the sonic boom pressure data  $(\Delta p/p_{ref})_{unc}$  were not equal to zero when the model nose shock was downstream of the survey probe, i.e., both the survey probes and reference probe were in the free-stream flow. Therefore, the sonic boom pressure signatures were adjusted by averaging the first five  $(\Delta p/p_{ref})_{unc}$  values in a signature run (survey and reference probes in the free-stream flow) and subtracting the average

value from each  $(\Delta p/p_{ref})_{unc}$  value, i.e.,

$$\left(\frac{\Delta p}{p}\right)_{cor} = \left(\frac{\Delta p}{p}\right)_{unc} - \left(\frac{\Delta p}{p}\right)_{avg} \quad (1)$$

Shown in figure 9 are the corrected and uncorrected sonic boom pressure signatures as a function of  $x - \beta h$  for a sample run to illustrate the approximate magnitude of the correction. No additional corrections or adjustments were performed to the sonic boom pressure signature data.

## Results

### Tabulated Data

Sonic boom pressure signature data are presented in Appendix A in tabulated form. Data from all three survey probes is presented in corrected and uncorrected form as described in the Corrections section. The uncorrected data is included so that the reader can apply their own correction to the measured data if desired.

### Schlieren Photographs

Because one of the tunnel doors that contains schlieren windows was removed during the test to allow the reference and survey probes to be attached to the tunnel sidewall, schlieren images were not obtained during the sonic boom measurement portion of the test. However, at the end of the test after all sonic boom measurements were completed, the solid test section door was removed and the test section door with schlieren windows was reinstalled so that schlieren images could be acquired.

Each test section is equipped with a single pass off-axis schlieren system. A schematic of the system is shown in figure 10. The complete schlieren system consists of a light source, two spherical mirrors, knife-edge, optical beam splitter, still camera, flat mirror, video camera, and image screen. The entire system is supported from a beam as a unit and can be positioned along the longitudinal axis of the test section to provide schlieren images of any part of the test section. The light source is provided by a xenon vapor arc lamp that is operated continuously. An optical beam splitter is located just behind the knife edge and is used to provide a schlieren image for both still and video cameras.

Schlieren photographs of the model were obtained at Mach numbers of 1.50, 1.60, and 1.80 over a range of angles of attack and are shown in figures 11, 12, and 13, respectively. Schlieren photographs were obtained at  $M = 1.50$  even though no sonic boom pressure measurements were acquired at this Mach number. During this test, the schlieren system knife-edge was oriented approximately parallel to the free-stream flow to highlight density gradients in the test section vertical direction. For this knife-edge orientation, increasing density gradients in the upward direction appear as white areas in the photographs. The vertical black lines in the photographs are the test section window support bars.

## Discussion

Sonic boom pressure signature plots are presented to illustrate salient features of the data, however, extensive data analysis was not conducted. All of the sonic boom pressure signature plots that are presented use the on-track (centerline) survey probe data, no off-track pressure signature data are

included. All of the pressure signature data are plotted as a function of  $x - \beta h$ . The model angle of attack was set to three nominal angles during the test,  $-0.26^\circ$ ,  $0.26^\circ$ , and  $0.68^\circ$ . Although the angle of attack values shown in the following figures will differ from these nominal values because of normal experimental variation, the angle of attack values referred to in the text and figure titles will be the nominal values.

## Data Repeatability

Six repeat runs were conducted at  $M = 1.60$  and  $h/L = 1.7$  during the test including three back-to-back repeat runs obtained near the end of the test. Shown in figure 14a are the three back-to-back repeat sonic boom pressure signatures; these signatures should show the best possible repeatability for this particular test. The results show that there are no significant shifts in the pressure peaks or expansions along the length of the model. The pressure peaks from the nose tip and the four nose segments are clearly measurable. Shown in figure 14b are the same three back-to-back repeats with three additional repeat runs that were obtained at different times (run 137 on one day and runs 149 and 160 on another day 6 hours apart). The results show additional scatter in the data but the overall repeatability of  $(\Delta p/p_{ref})_{cor}$  appears to be less than approximately  $\pm 0.0015$ .

As discussed previously, the first five data points in each pressure signature run was used to adjust the signatures to account for static pressure variation within the test section. Because the reference probe and the three survey probes were in the free-stream flow for these five data points, these data were used to examine the variation of  $(\Delta p/p_{ref})_{cor}$  for each probe over the course of the entire test. Shown in figure 15 are the individual  $(\Delta p/p_{ref})_{cor}$  values for the first five data points for all runs at  $M = 1.60$  and the computed standard deviations. These data were acquired over a period of 8 days at various times during the day. The results show that the standard deviations remained relatively constant over the length of the test although survey probe 3 did generally show larger variation than survey probes 1 and 2 for runs 133, 140, 196, 197, 198, and 202. The reason for the larger variation in survey probe 3 data is unknown.

## Variation of $C_N$

As discussed previously in the Model Installation section, the model  $C_N$  varied during the pressure signature runs because of flow gradients in the test section. Shown in figure 16 is  $C_N$  as a function of  $x - \beta h$  for the three back-to-back repeat runs shown in figure 14a. The general trend of the data is the same for all three runs with  $C_N$  varying by approximately 0.01 over the entire run.

Shown in figure 17 is  $C_N$  as a function of  $x - \beta h$  for three angles of attack at  $h/L = 1.2$ . The general trend of  $C_N$  for the three angles of attack are the same indicating that the flow field variation in the test section causing the  $C_N$  variation is independent of angle of attack. Figure 18 shows the same data as figure 17 with the addition of data for  $h/L = 1.7$ . The general trend of the  $C_N$  variation is different between the two values of  $h/L$  at each angle of attack, however, the general trend of  $C_N$  for each angle of attack at each  $h/L$  is the same. These data also indicate that the variation of  $C_N$  is caused by flow field gradients and is independent of angle of attack.

## Variation of $p_{ref}$

Shown in figure 19 are examples of typical and larger than typical reference probe pressure variation measured during this test. Figure 19a shows that  $p_{ref}$  varied by approximately 1 psfa, which was typical for the entire test although there were a few runs which exhibited larger variation in  $p_{ref}$ . A typical example of the larger variation of  $p_{ref}$  is shown in figure 19b.

The primary cause of the  $p_{ref}$  variation is believed to be tunnel stagnation pressure variation. Shown in figure 20 is  $p_{ref}$  and tunnel stagnation pressure,  $p_0$ , as a function of  $x - \beta h$  for the data previously shown in figure 19. The reason for the increased  $p_0$  variation in figure 20b compared to figure 20a is probably the result of the tunnel stagnation pressure control system settings being different between the runs. However, since the stagnation pressure control system settings were not recorded with the data, it is impossible to confirm this hypothesis.

### Effect of $h/L$

The effect of  $h/L$  on the sonic boom pressure signatures for three angles of attack are shown in figure 21. Although three  $h/L$  values were tested, data from only two  $h/L$  values are plotted because at the smallest  $h/L$  value only about one half of the pressure signature was obtained because there was not enough longitudinal movement available in the model support system to acquire the complete aircraft signature. As expected, the data show that as  $h/L$  increases, the strength of the aircraft shocks decrease. At  $\alpha = 0.68$  (figure 21c), the pressure signature just before the wing expansion for  $h/L = 1.7$  remains essentially constant rather than rising to a peak for the  $h/L = 1.2$  case.

### Effect of Angle of Attack

The effect of angle of attack on the sonic boom pressure signatures for  $h/L = 1.2$  and  $1.7$  are shown in figure 22 for the model without boundary layer transition grit. Angle of attack has little effect on the peak pressures from the nose tip and the four nose segments, however, as angle of attack and consequently normal force coefficient increases, the peak pressures due to the wing also increase. Shown in figure 23 are results showing the effect of angle of attack for the model at  $h/L = 1.7$  and with boundary layer grit (a complete description of the grit applied to the model will be discussed in a later section). Comparing the results for the models without and with grit, figures 22b and 23, respectively, show that the expansion from the wing is slightly less for the wing without grit. A pressure peak caused by the boundary layer grit can be seen at  $x - \beta h \approx 3.5$  in. (figure 23).

### Effect of Survey Probe Position

The survey probes were mounted to a mechanism that allowed the longitudinal position of the probes to be varied remotely while the tunnel was in operation. Shown in figure 24 are three sonic boom pressure signatures that were acquired back-to-back while the position of the survey probes was varied by 2 in. between each run. Ideally, these runs should be as repeatable as the repeat runs shown in figure 14, however, the results indicate that there is additional scatter in the data and possibly a slight shift in  $x - \beta h$ . These data suggest that the variation in tunnel flow conditions as a function of location within the test section is a factor in the additional data scatter because both the model and survey probes were in different spatial locations within the test section for each run.

### Effect of Mach Number

The effect of Mach number on the sonic boom pressure signatures at three angles of attack are shown in figure 25. The pressure peaks from the nose tip and the four nose segments are not significantly affected by the change in Mach number from 1.60 to 1.80. However, the pressure peak for the wing (near  $x - \beta h \approx 7$  in.) and expansion after the wing are larger at  $M = 1.80$  than  $M = 1.60$ .

## Effect of Boundary Layer Transition Grit

Sublimation tests were conducted to determine the size and location of boundary layer grit that would transition the boundary layer flow from laminar to turbulent. The sublimation tests identified a grit size that would transition the flow on the wing, however, no grit size was identified that would transition the nose and fuselage boundary layer. Tunnel test time constraints prevented further investigation to determine an appropriate grit size for the model nose. A complete description of the sublimation portion of the test is presented in Appendix B.

The boundary layer grit that was applied to the model based on the sublimation tests is described below. The transition strips consisted of sand grit sparsely sprinkled in a lacquer film.

- #50 grit (0.0128 in.  $\pm$  0.0011 in. nominal size) on model nose  $\approx$  5.0 in. and 7.5 in. from the nose tip measured along the model surface. The strip was  $\approx$  0.125 in. wide measured streamwise.
- # 80 grit (0.0077 in.  $\pm$  0.0007 in. nominal size) on outboard 2/3 of wing. The strip was located 0.4 in. aft of the wing leading edge measured streamwise and was approximately 0.063 in. wide (measured streamwise).
- # 50 grit on inboard 1/3 of wing. The strip was located 0.4 in. aft of the wing leading edge measured streamwise and was approximately 0.063 in. wide (measured streamwise).

The effect of boundary layer grit on the sonic boom signatures for  $M = 1.60$  is shown in figure 26. The primary affect of the boundary layer grit is seen downstream of the wing expansion. Turbulent flow over the model wing does not significantly affect the peak pressures generated by the wing. The grit located on the model nose does not create a noticeable pressure peak, whereas, the effect of the wing boundary layer grit does show a compression, expansion, and re-compression at  $x - \beta h \approx 4$  in.

## Concluding Remarks

A wind tunnel test has been conducted by Gulfstream Aerospace Corporation (GAC) to measure the sonic boom signature of a low boom Mach 1.6 cruise business jet in the Langley Unitary Plan Wind Tunnel at Mach numbers 1.60 and 1.80 at separation distances from 0.5 to 1.7 reference body lengths and at three angles of attack. Both on-track and off-track pressure signature data were acquired. Through a cooperative agreement between GAC and the National Aeronautics and Space Administration (NASA), GAC provided NASA access to the experimental data. NASA is publishing these data in an effort to supply experimental data for a low sonic boom configuration to the sonic boom research community.

Tabulated pressure signature data are provided to facilitate their use. Schlieren images of the model are also presented. Plots of selected data are presented to illustrate the salient features of the data, however, no extensive data analysis was conducted.

## References

1. Wayman, Thomas R.; Waithe, Kenrick A.; Howe, Donald C.; Bangert, Linda; and Wilcox, Floyd: Near Field Acoustic Test on a Low Boom Configuration in Langley's 4 x 4 Wind Tunnel. AIAA-2011-3331, 2011.

2. Waithe, Kenrick A.: Design of a Wind Tunnel Mount for a Low Boom Test. AIAA-2011-3334, 2011.
3. Durston, Donald A.; Cliff, Susan E.; Wayman, Thomas R.; Merret, Jason M.; Elmiligui, Alaa A.; and Bangert, Linda S.: Near-Field Sonic Boom Test on Two Low-Boom Configurations Using Multiple Measurement Techniques at NASA Ames. AIAA-2011-3333, 2011.
4. Elmiligui, Alaa A.; Cliff, Susan E.; Wilcox, Floyd; Nemec, Marian; Bangert, Linda; Aftosmis, Michael, J.; and Parlette, Edward: Sonic Boom Computations for a Mach 1.6 Cruise Low Boom Configuration and Comparisons with Wind Tunnel Data. AIAA-2011-3496, 2011.
5. Wayman, Thomas R.; Hicks, George R.; and Merret, Jason: Force and Moment Test on a Low Boom Configuration in Glenn's 8 x 6 Wind Tunnel. AIAA-2011-3332, 2011.
6. Jackson, Charlie M., Jr.; Corlett, William A.; and Monta, William J.: *Description and Calibration of the Langley Unitary Plan Wind Tunnel*. NASA TP-1905, 1981.
7. Braslow, Albert L.; and Knox, Eugene C.: *Simplified Method for Determination of Critical Height of Distributed Roughness Particles for Boundary-Layer Transition at Mach Numbers from 0 to 5*. NACA TN 4363, Sept. 1958.
8. Braslow, Albert L.; Hicks, Raymond M.; and Harris, Roy V., Jr.: *Use of Grit-Type Boundary-Layer-Transition Trips on Wind-Tunnel Models*. NASA TN D-3579, Sept. 1966.



(a) Model mounted in wind tunnel.

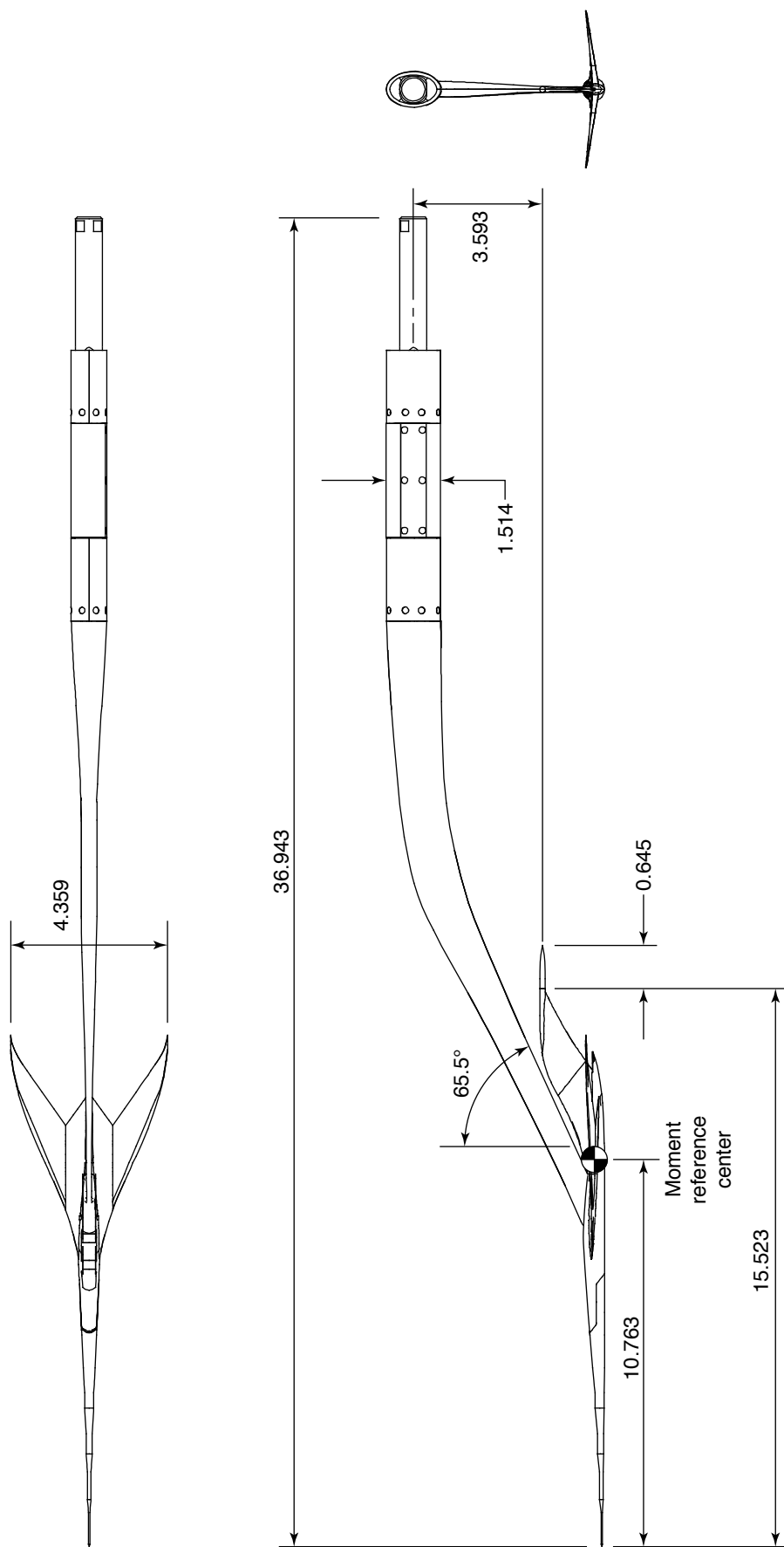
Figure 1. Low sonic boom business jet configuration.



(b) Isometric sketch of model and blade sting.

Figure 1. Continued.





(c) Three-view sketch of model. Dimensions are in inches unless otherwise noted.

Figure 1. Concluded.

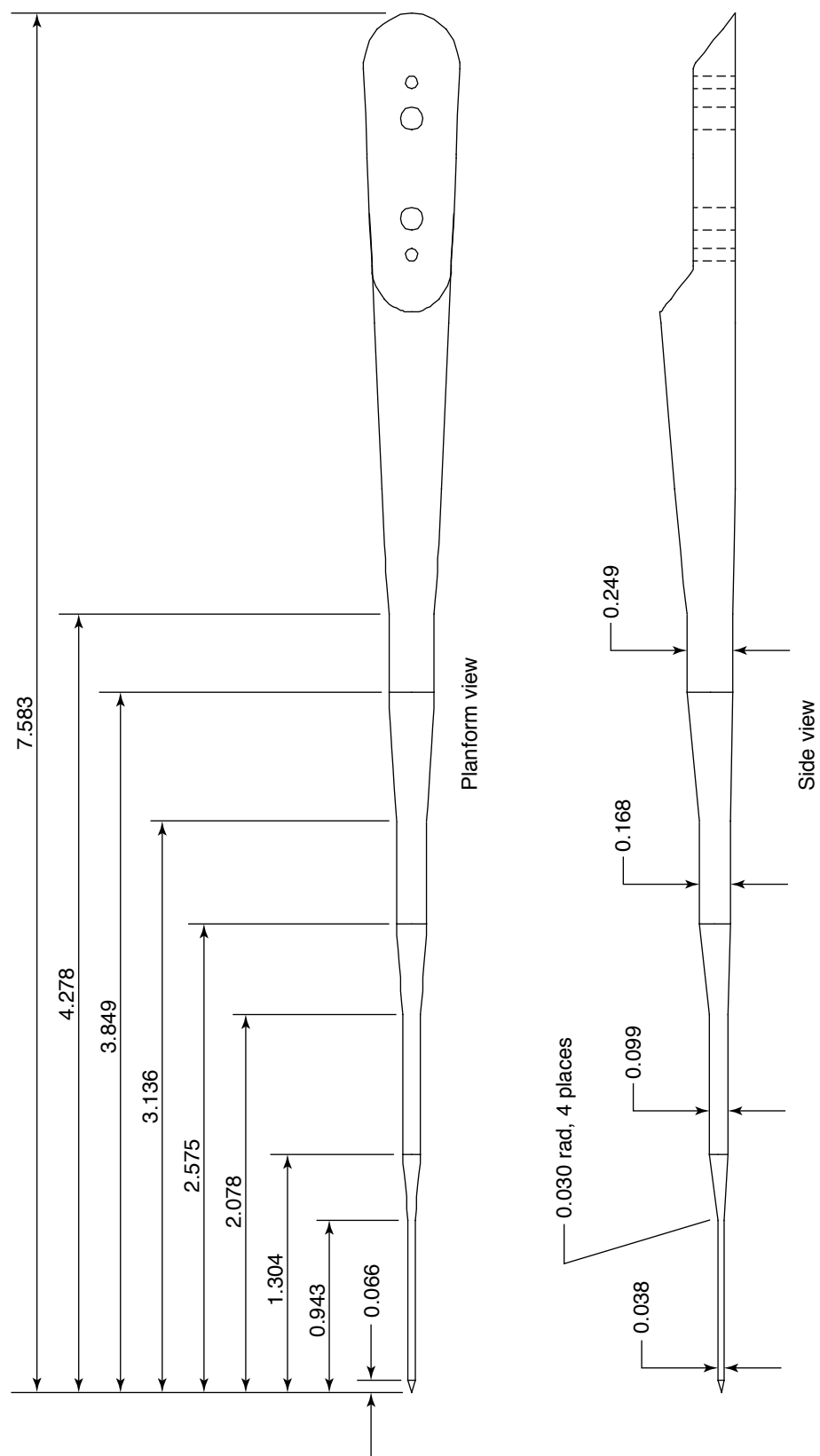
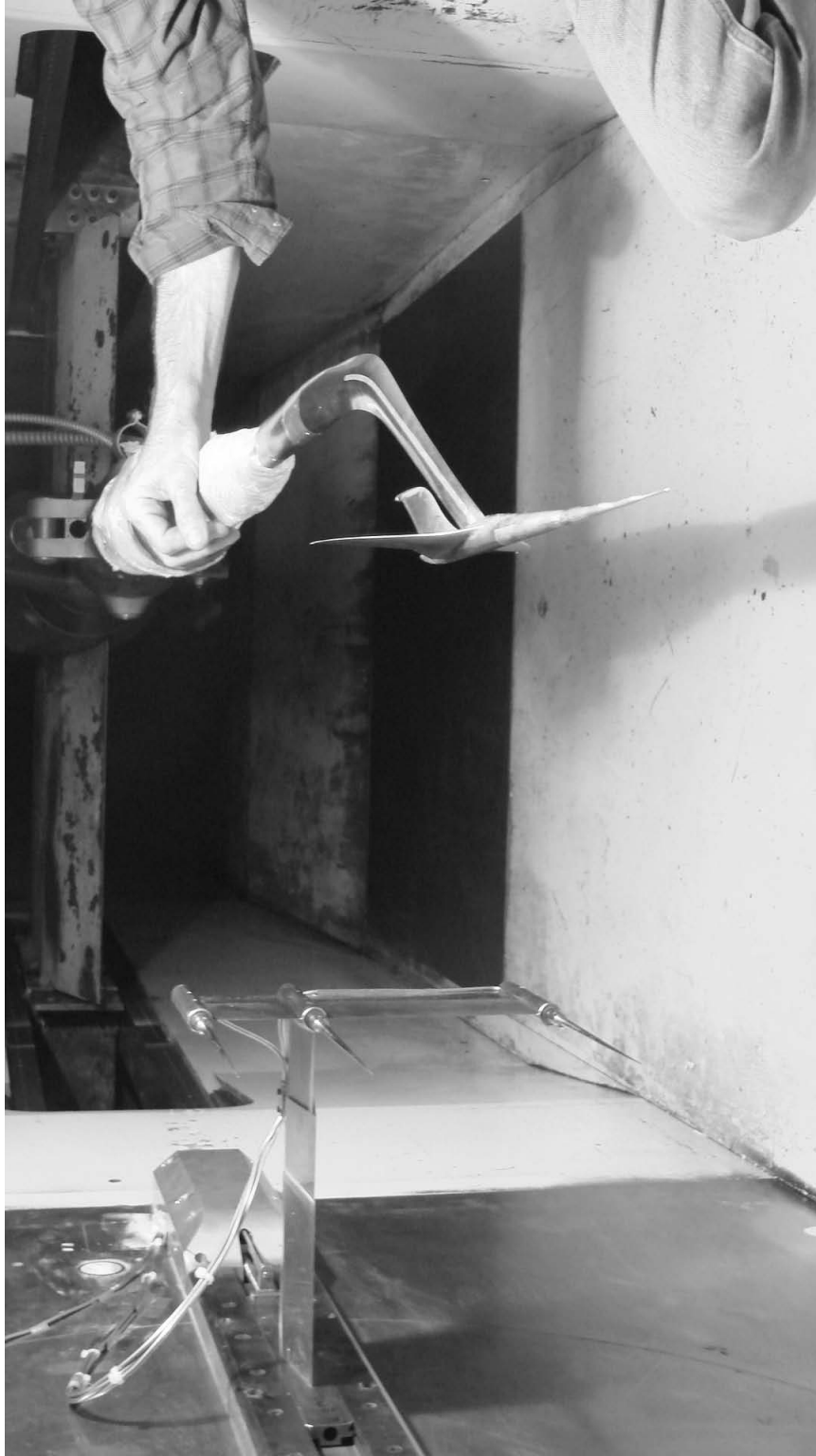


Figure 2. Nose details. Dimensions are in inches.



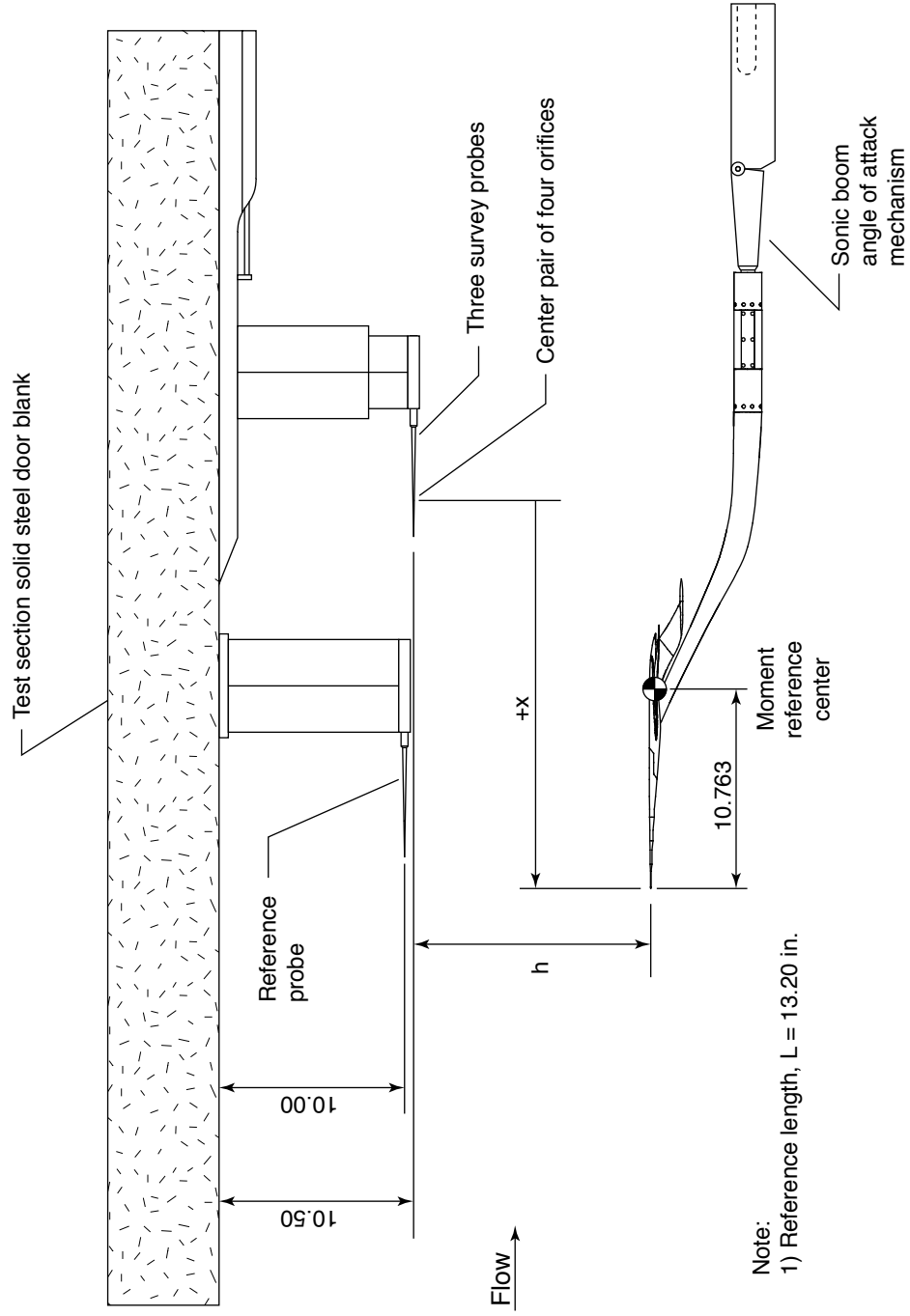
(a) View looking at the tunnel sidewall.

Figure 3. Model installation photographs (reference probe is outside the photograph field of view.)



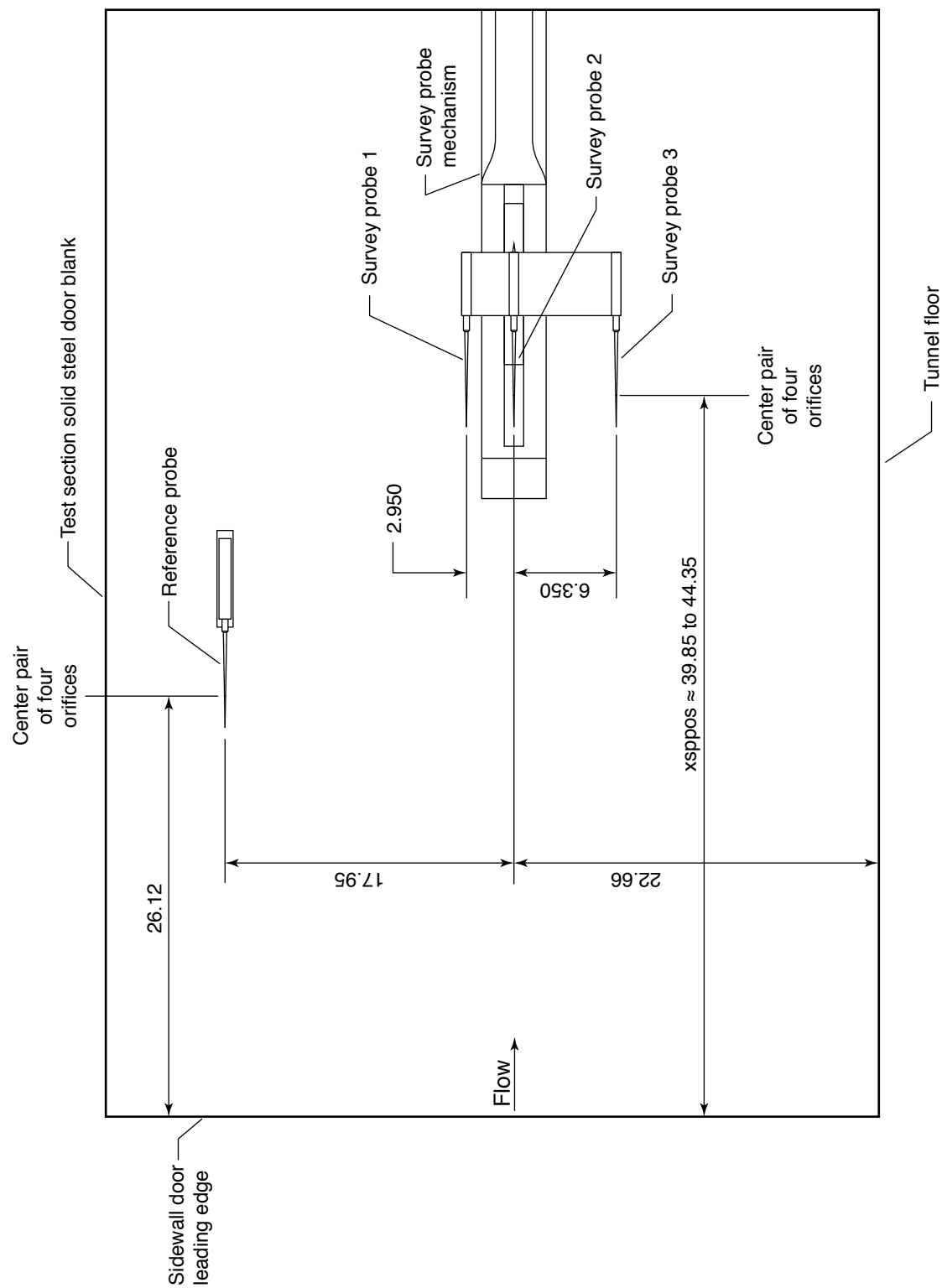
(b) View looking downstream.

Figure 3. Concluded.



(a) Top view.

Figure 4. Model installation sketches. Dimensions are in inches.



(b) Side view without model.

Figure 4. Concluded.

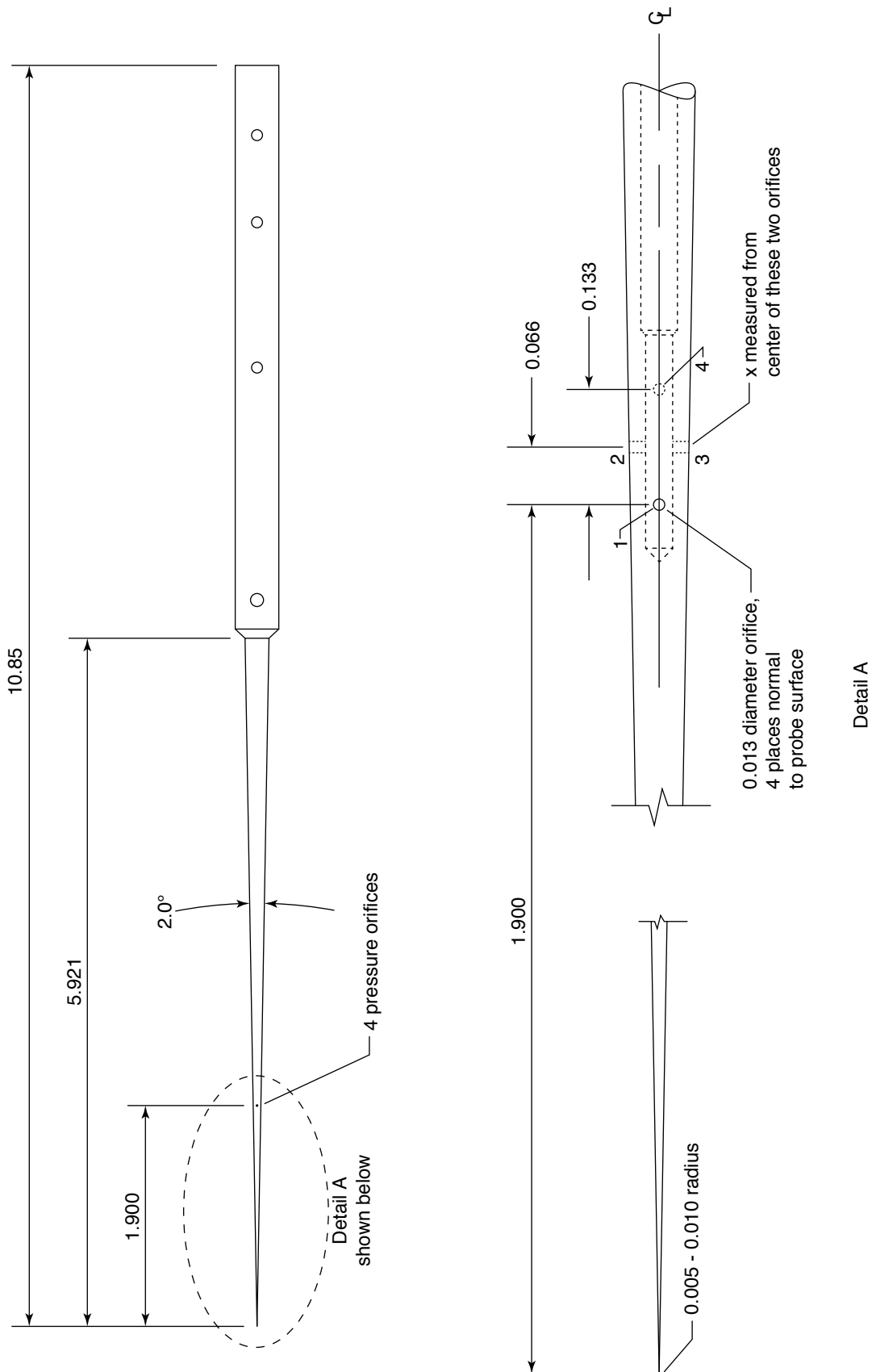
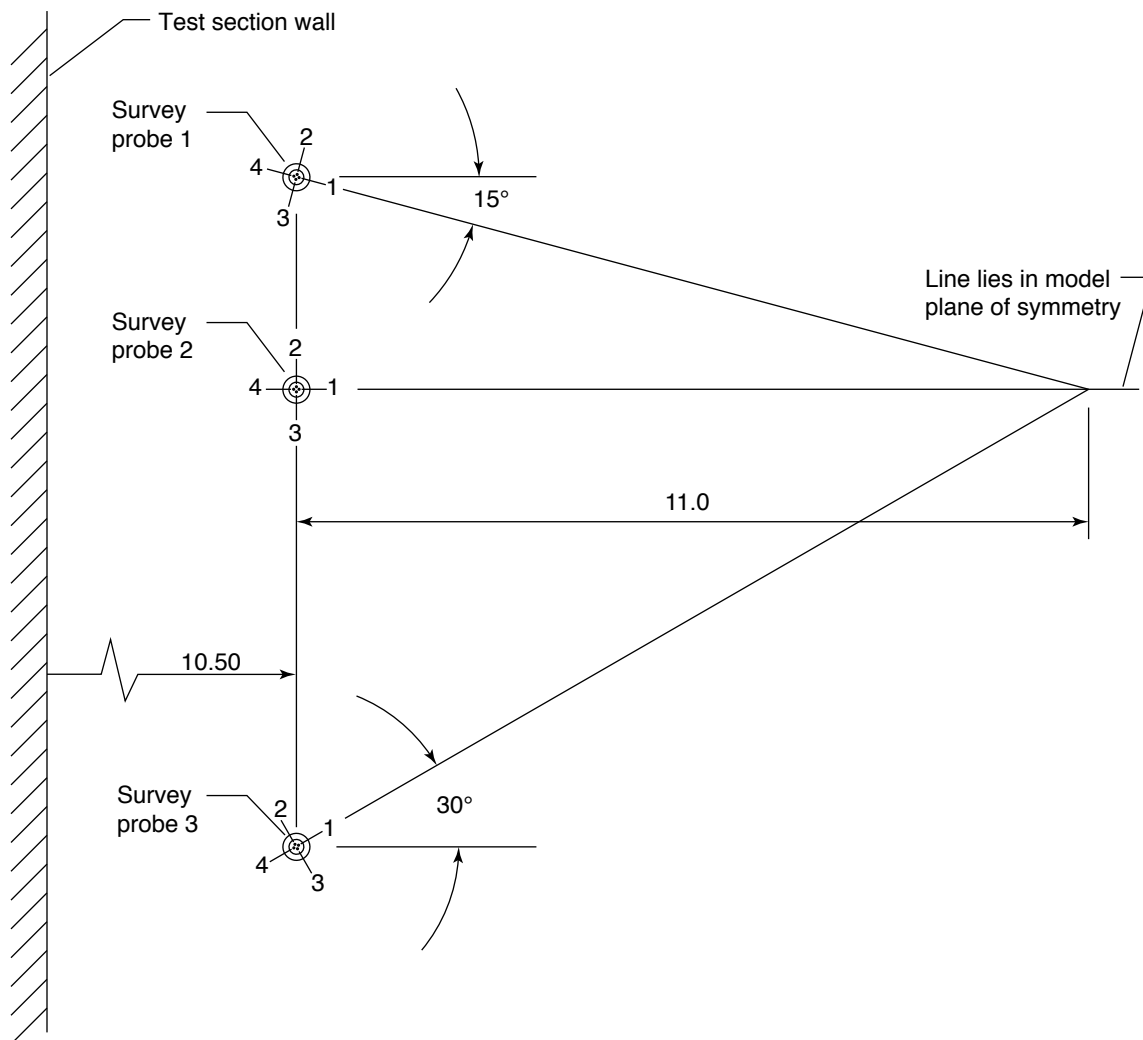
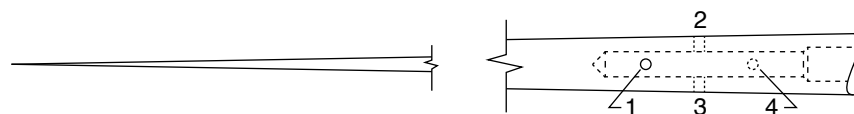


Figure 5. Reference and survey probe details. Dimensions are in inches unless otherwise noted.



(a) View looking downstream.



(b) Survey probe orifice identification.

Figure 6. Survey probe orifice orientation (for clarity, the survey probe holder and mechanism are not shown). Dimensions are in inches unless otherwise noted.



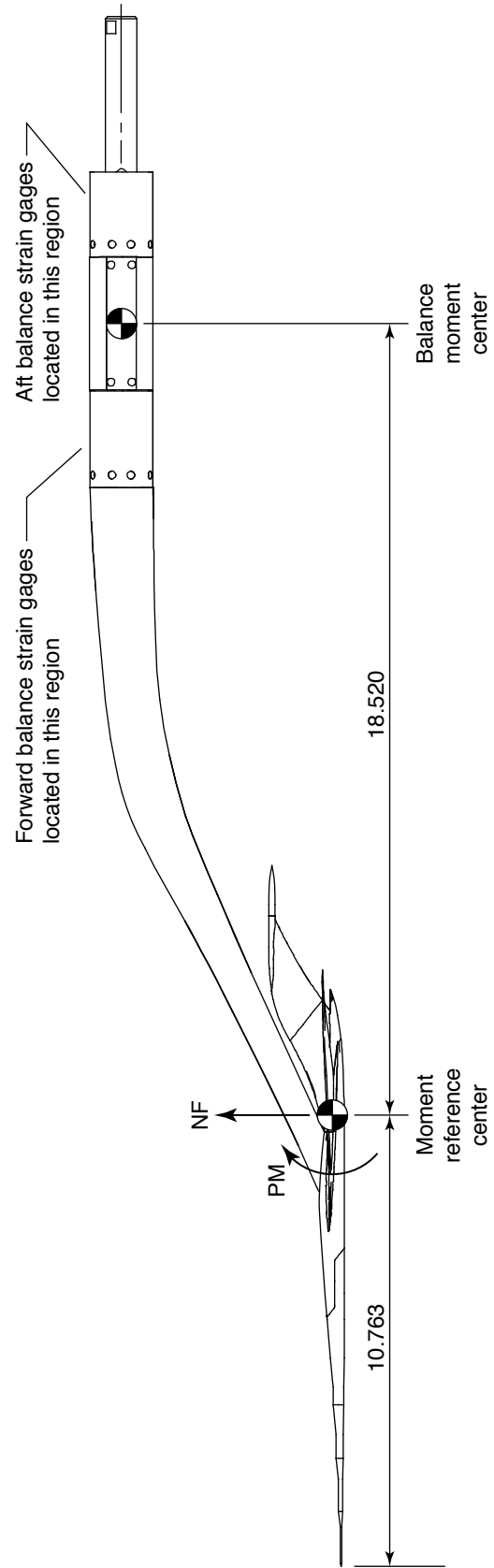


Figure 7. Model moment reference center location. Dimensions are in inches unless otherwise noted.

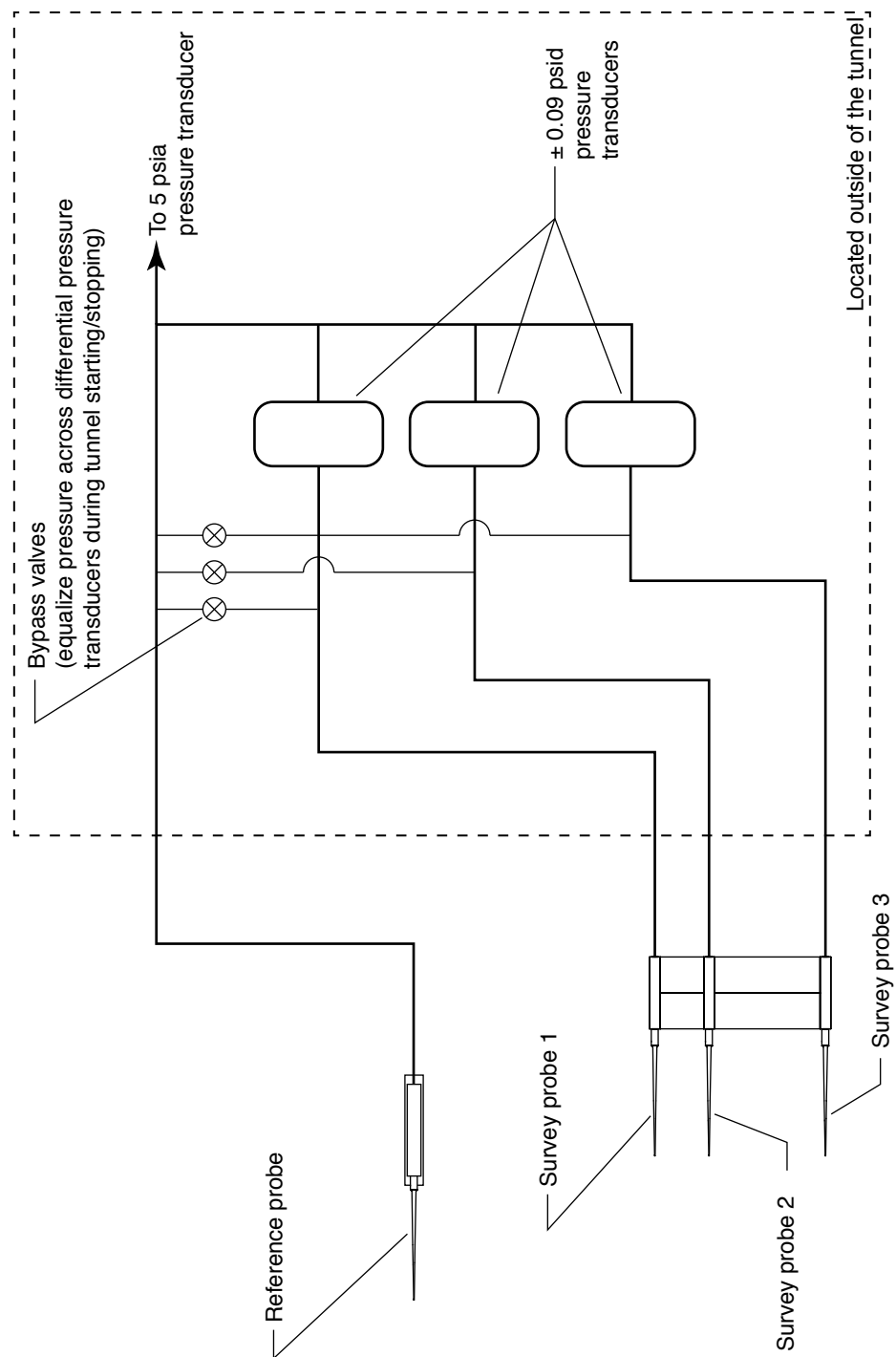


Figure 8. Pressure instrumentation schematic.

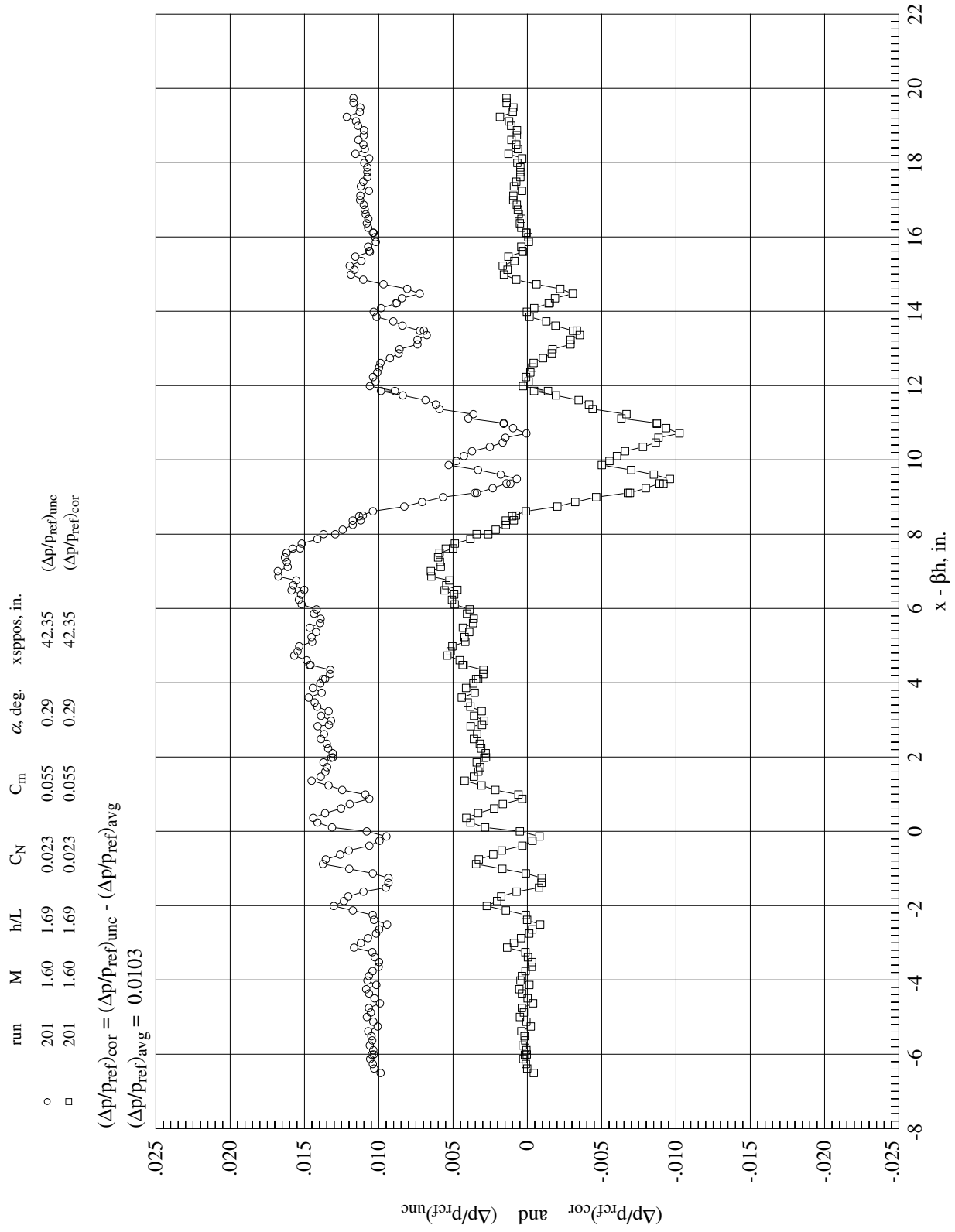


Figure 9. Corrected and uncorrected sonic boom pressure signatures.

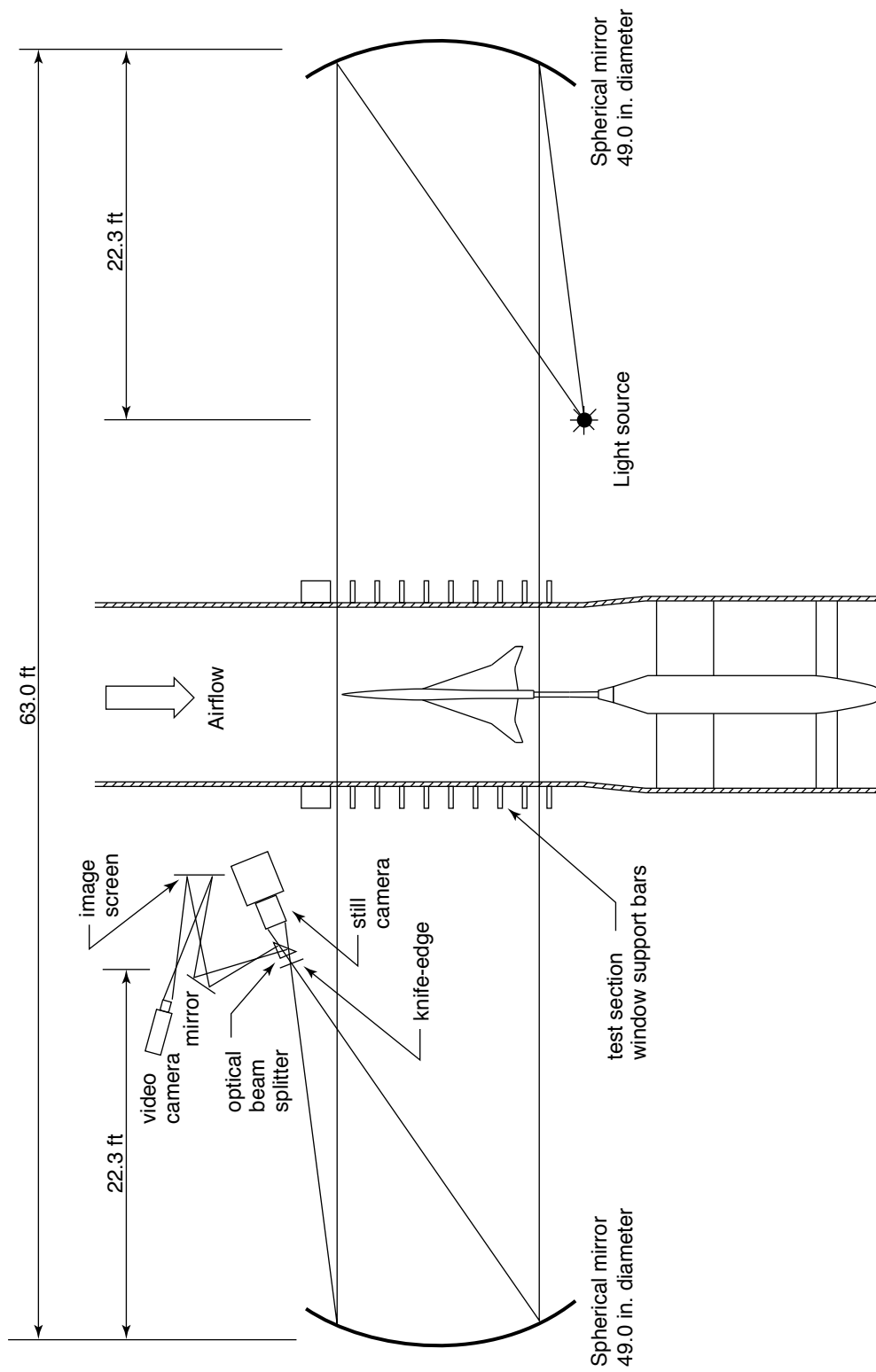
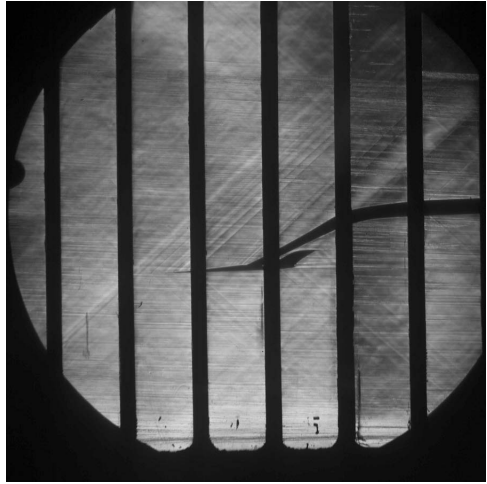
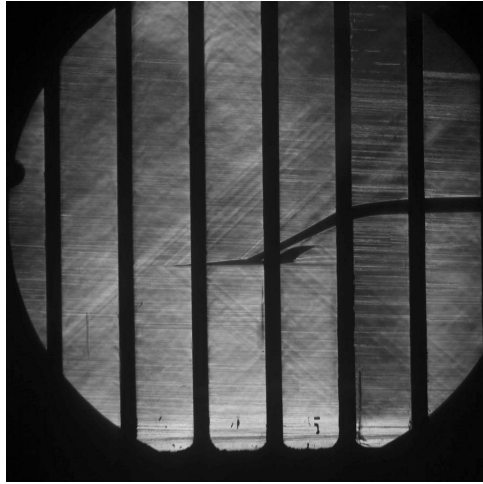


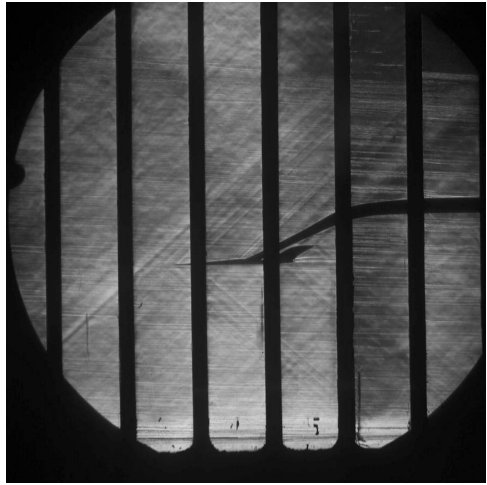
Figure 10. Schlieren system schematic.



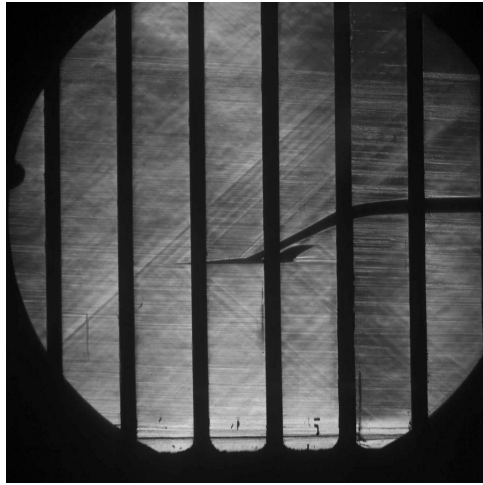
(a)  $\alpha = -1.12^\circ$ .



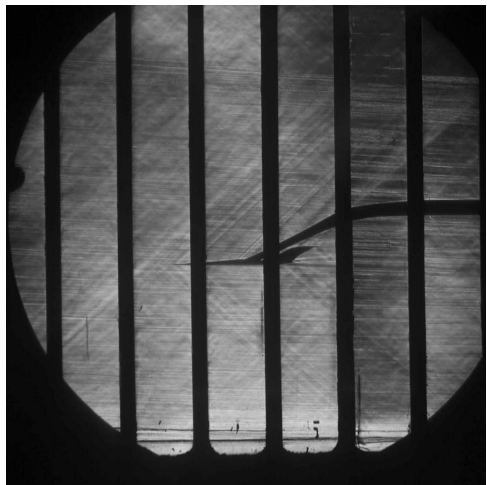
(b)  $\alpha = -0.25^\circ$ .



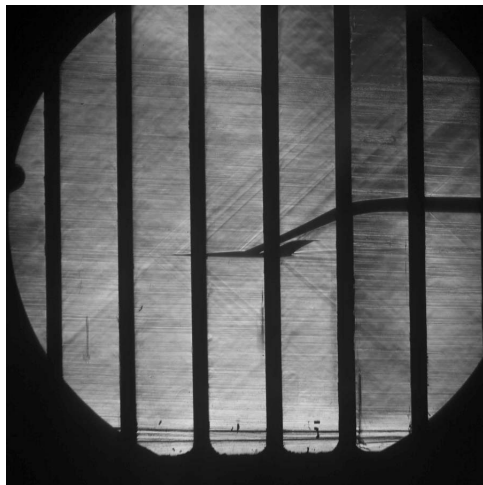
(c)  $\alpha = -0.05^\circ$ .



(d)  $\alpha = 0.22^\circ$ .

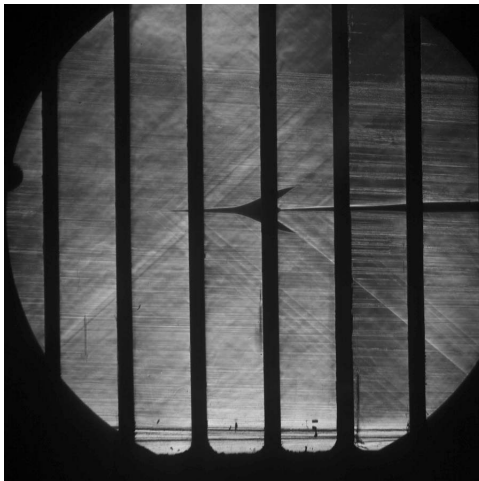


(e)  $\alpha = 0.66^\circ$ .



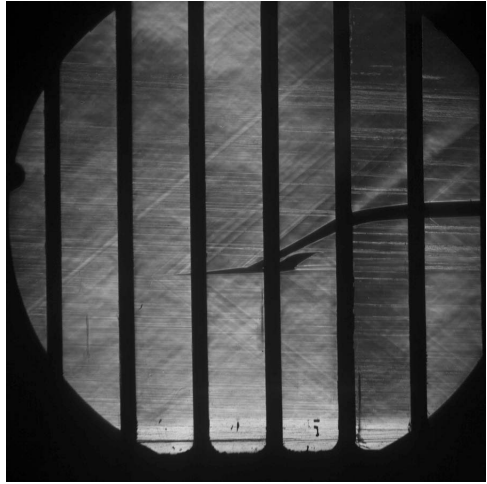
(f)  $\alpha = 1.87^\circ$ .

Figure 11. Schlieren images at  $M = 1.50$ .

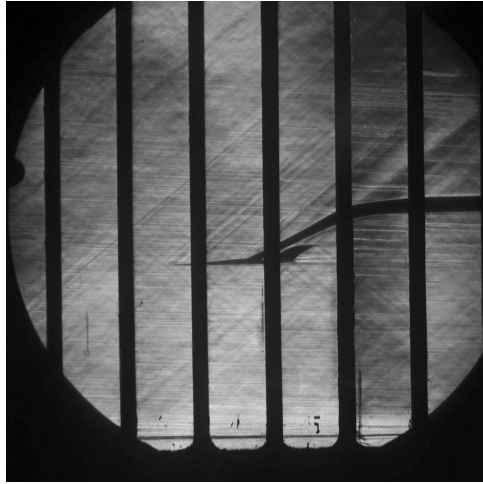


(g)  $\alpha = -0.02^\circ$ ,  $\phi = -90^\circ$  (viewing top surface of the model).

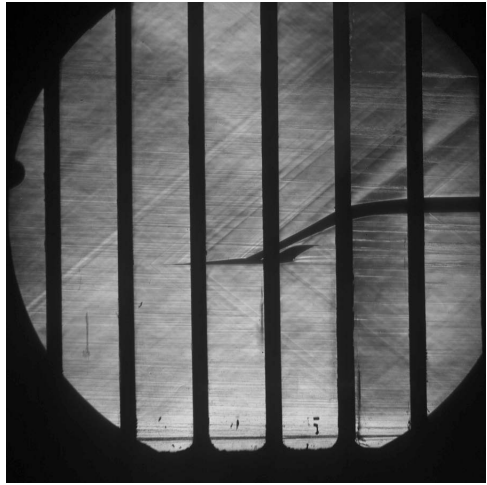
Figure 11. Concluded.



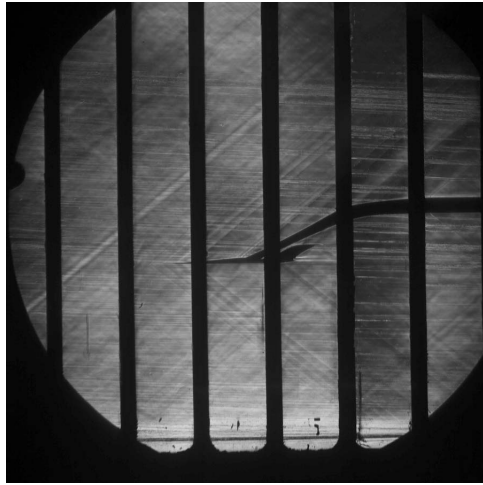
(a)  $\alpha = -1.22^\circ$ .



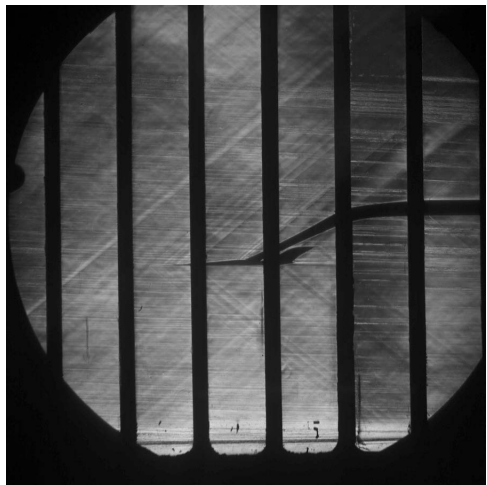
(b)  $\alpha = -0.24^\circ$ .



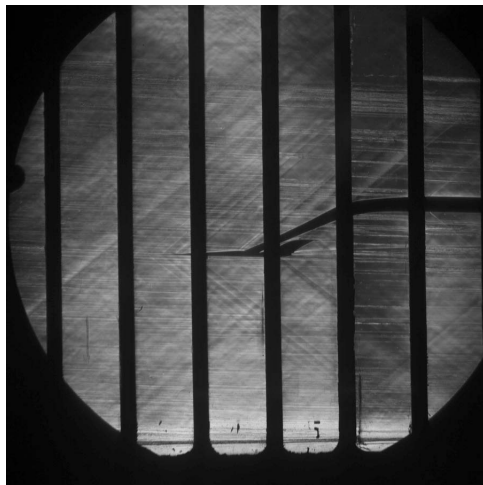
(c)  $\alpha = 0.04^\circ$ .



(d)  $\alpha = 0.35^\circ$ .

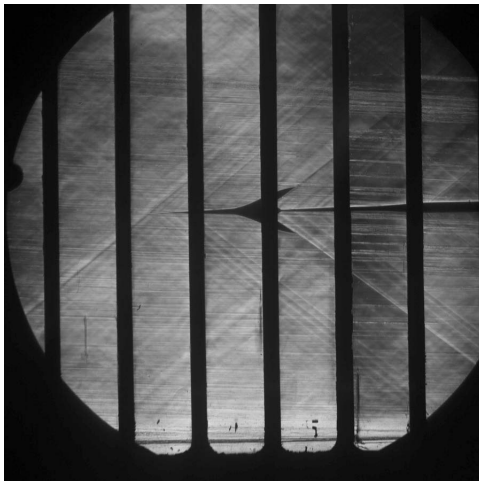


(e)  $\alpha = 0.68^\circ$ .



(f)  $\alpha = 1.87^\circ$ .

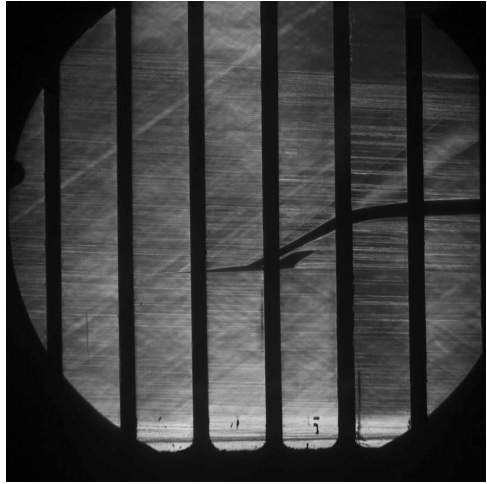
Figure 12. Schlieren images at  $M = 1.60$ .



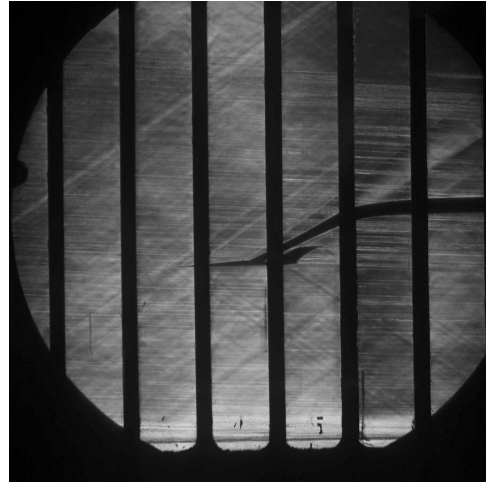
(g)  $\alpha = 0.01^\circ$ ,  $\phi = -90^\circ$  (viewing top surface of the model).

Figure 12. Concluded.

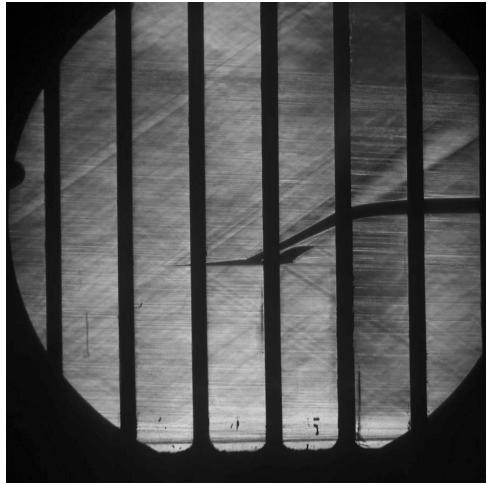




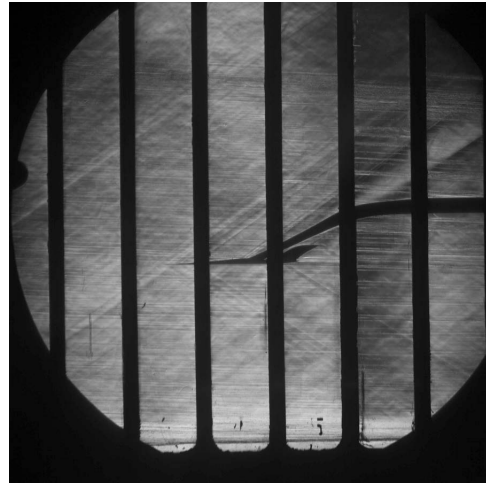
(a)  $\alpha = -1.20^\circ$ .



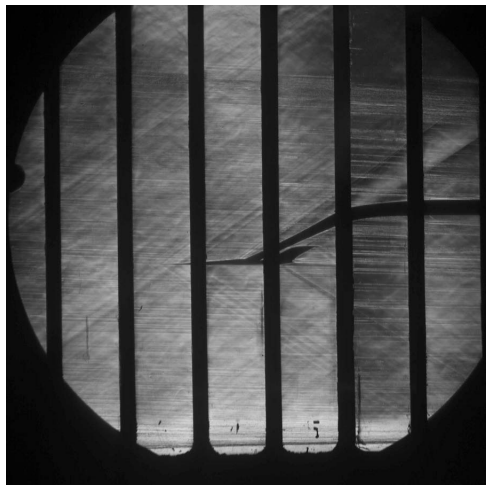
(b)  $\alpha = -0.27^\circ$ .



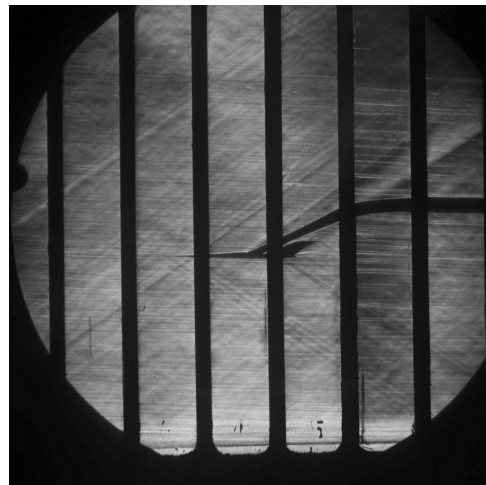
(c)  $\alpha = -0.02^\circ$ .



(d)  $\alpha = 0.25^\circ$ .

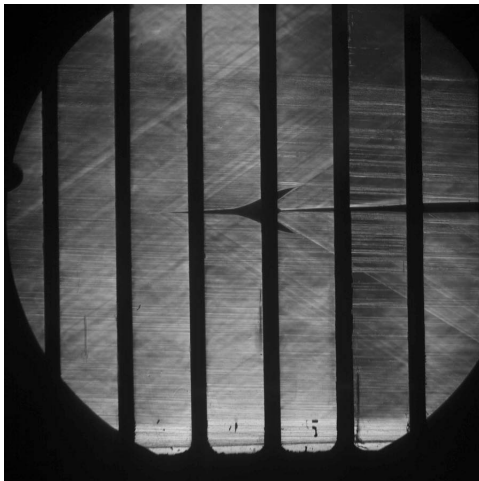


(e)  $\alpha = 0.65^\circ$ .



(f)  $\alpha = 1.83^\circ$ .

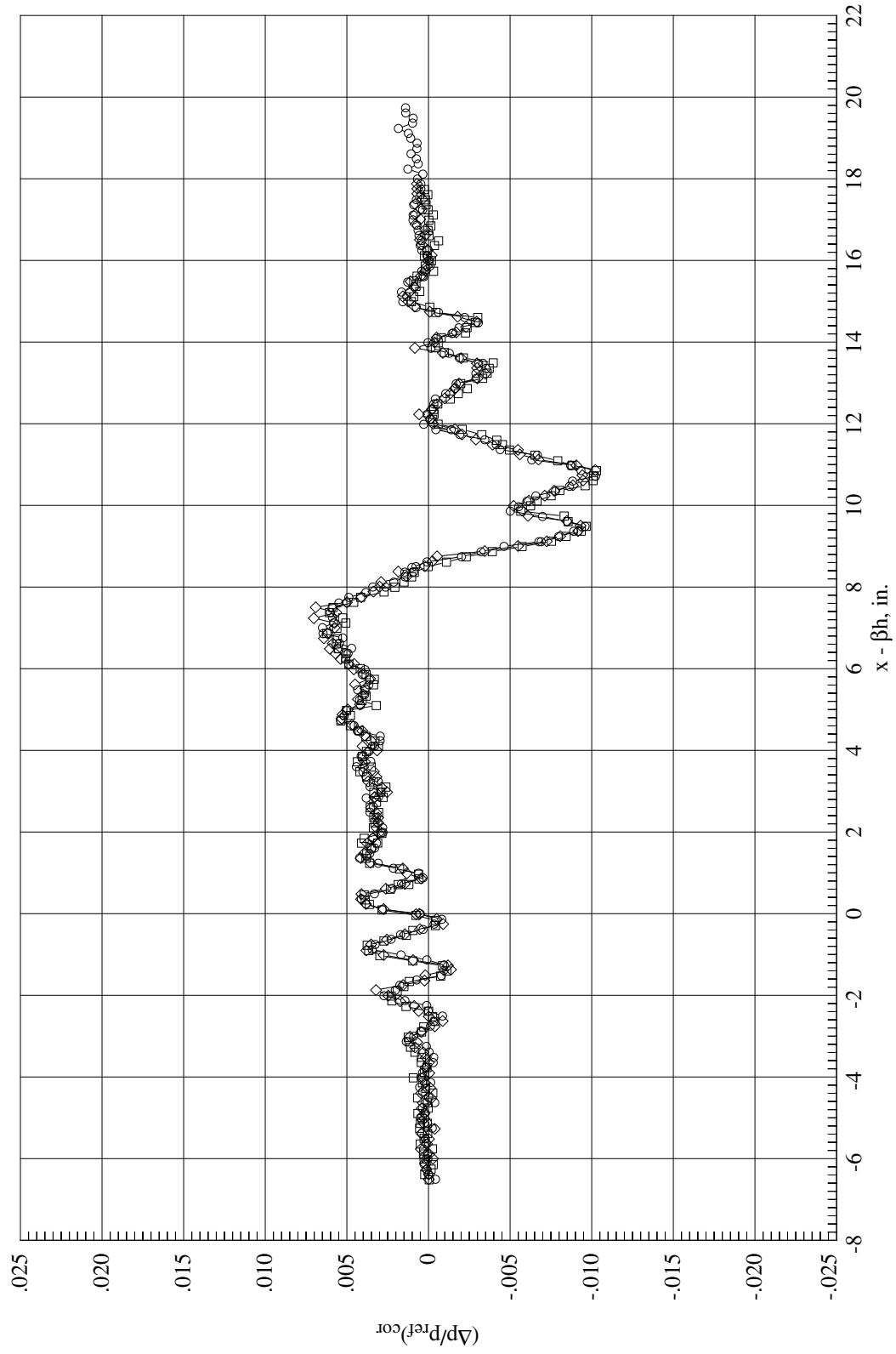
Figure 13. Schlieren images at  $M = 1.80$ .



(g)  $\alpha = 0.07^\circ$ ,  $\phi = -90^\circ$  (viewing top surface of the model).

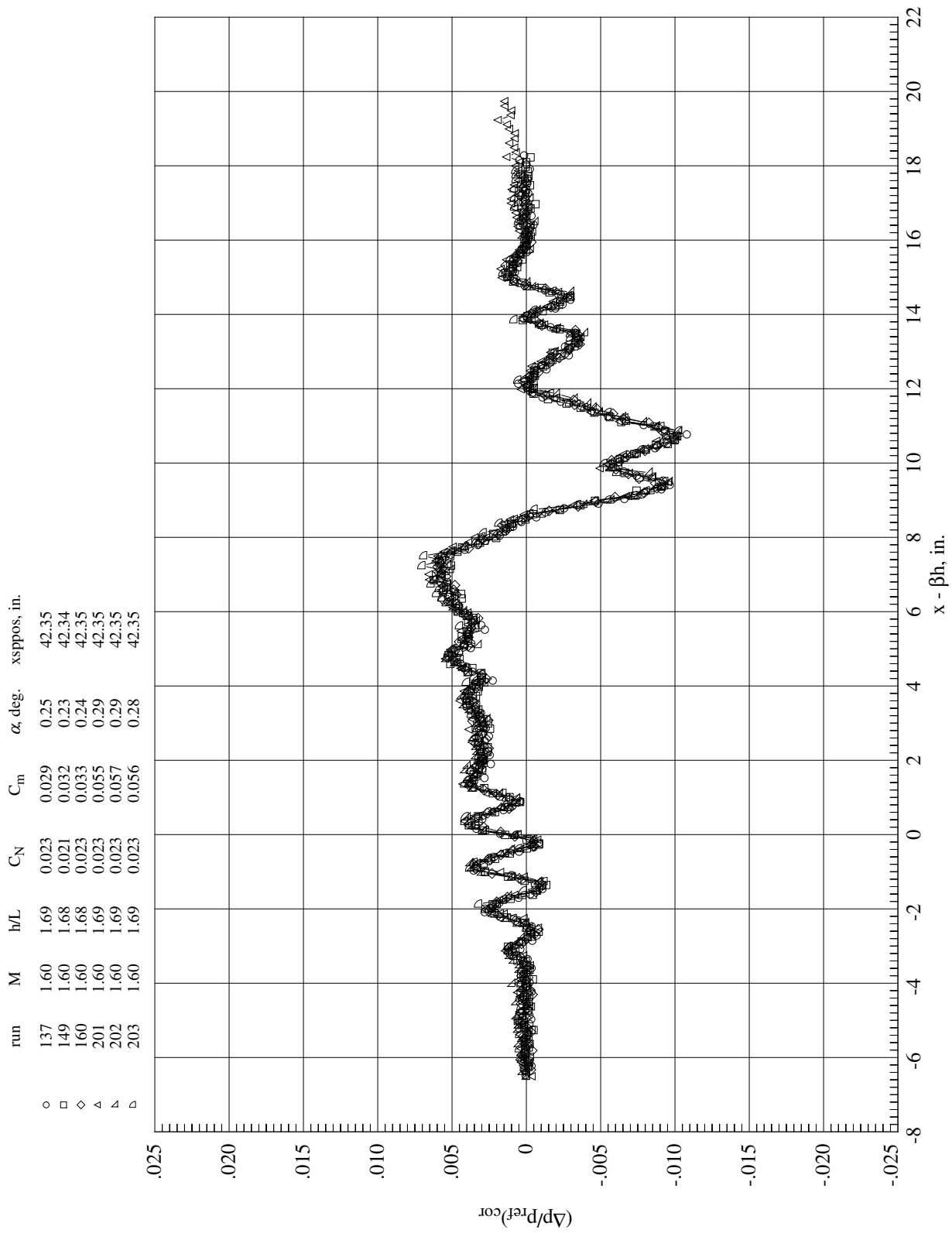
Figure 13. Concluded.

|   | run | M    | h/L  | C <sub>N</sub> | C <sub>m</sub> | $\alpha$ , deg. | xsppos, in. |
|---|-----|------|------|----------------|----------------|-----------------|-------------|
| ○ | 201 | 1.60 | 1.69 | 0.023          | 0.055          | 0.29            | 42.35       |
| □ | 202 | 1.60 | 1.69 | 0.023          | 0.057          | 0.29            | 42.35       |
| ◇ | 203 | 1.60 | 1.69 | 0.023          | 0.056          | 0.28            | 42.35       |



(a) Back-to-back repeats.

Figure 14. Repeatability of sonic boom pressure signatures.



(b) Back-to-back and non back-to-back repeats.

Figure 14. Concluded.

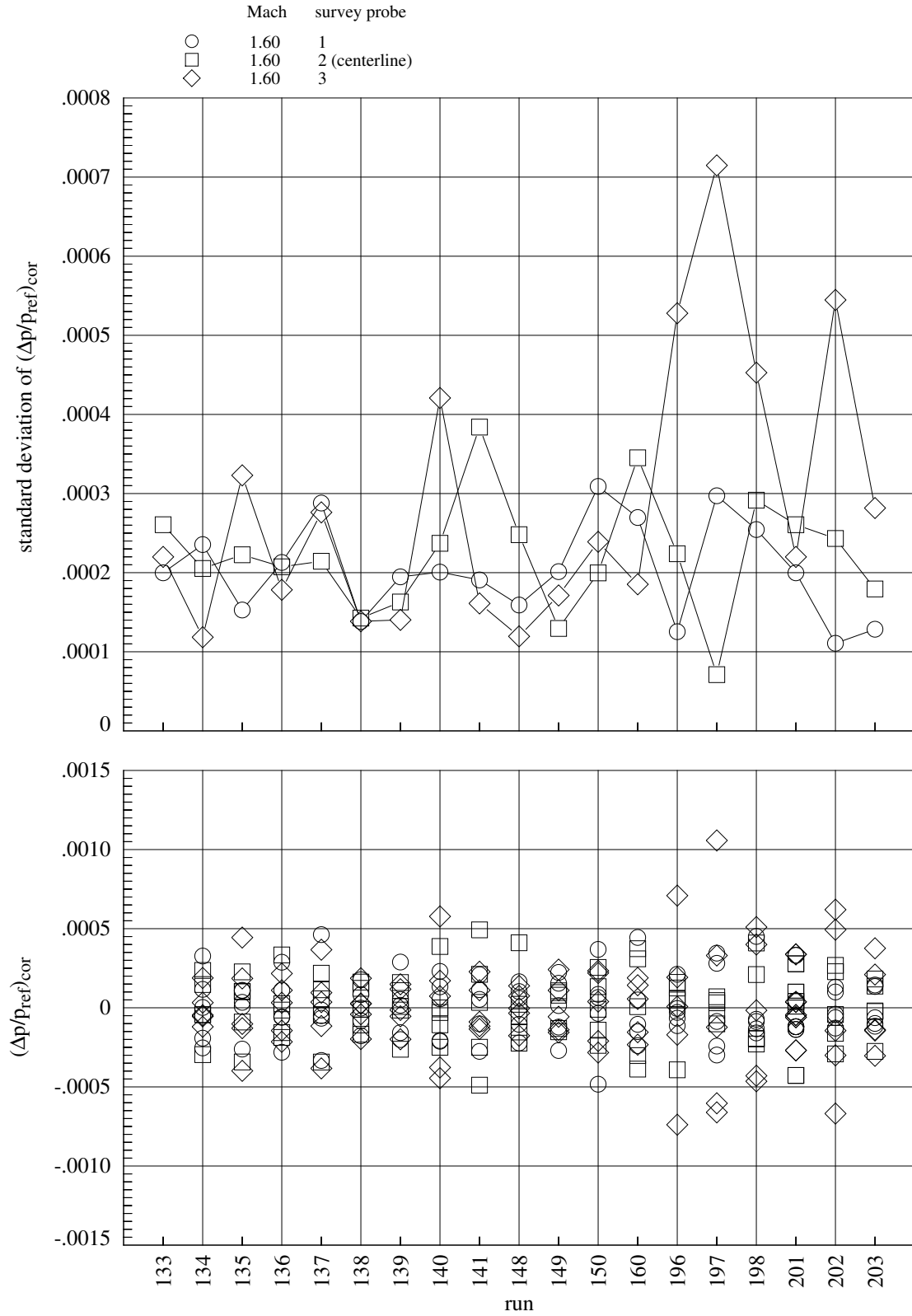


Figure 15. Variation in  $(\Delta p/p_{ref})_{cor}$  for first five data points in each run.

| run | M    | h/L  | $C_N$ | $C_m$ | $\alpha$ , deg. | xsp, in. |
|-----|------|------|-------|-------|-----------------|----------|
| 201 | 1.60 | 1.69 | 0.023 | 0.055 | 0.29            | 42.35    |
| 202 | 1.60 | 1.69 | 0.023 | 0.057 | 0.29            | 42.35    |
| 203 | 1.60 | 1.69 | 0.023 | 0.056 | 0.28            | 42.35    |

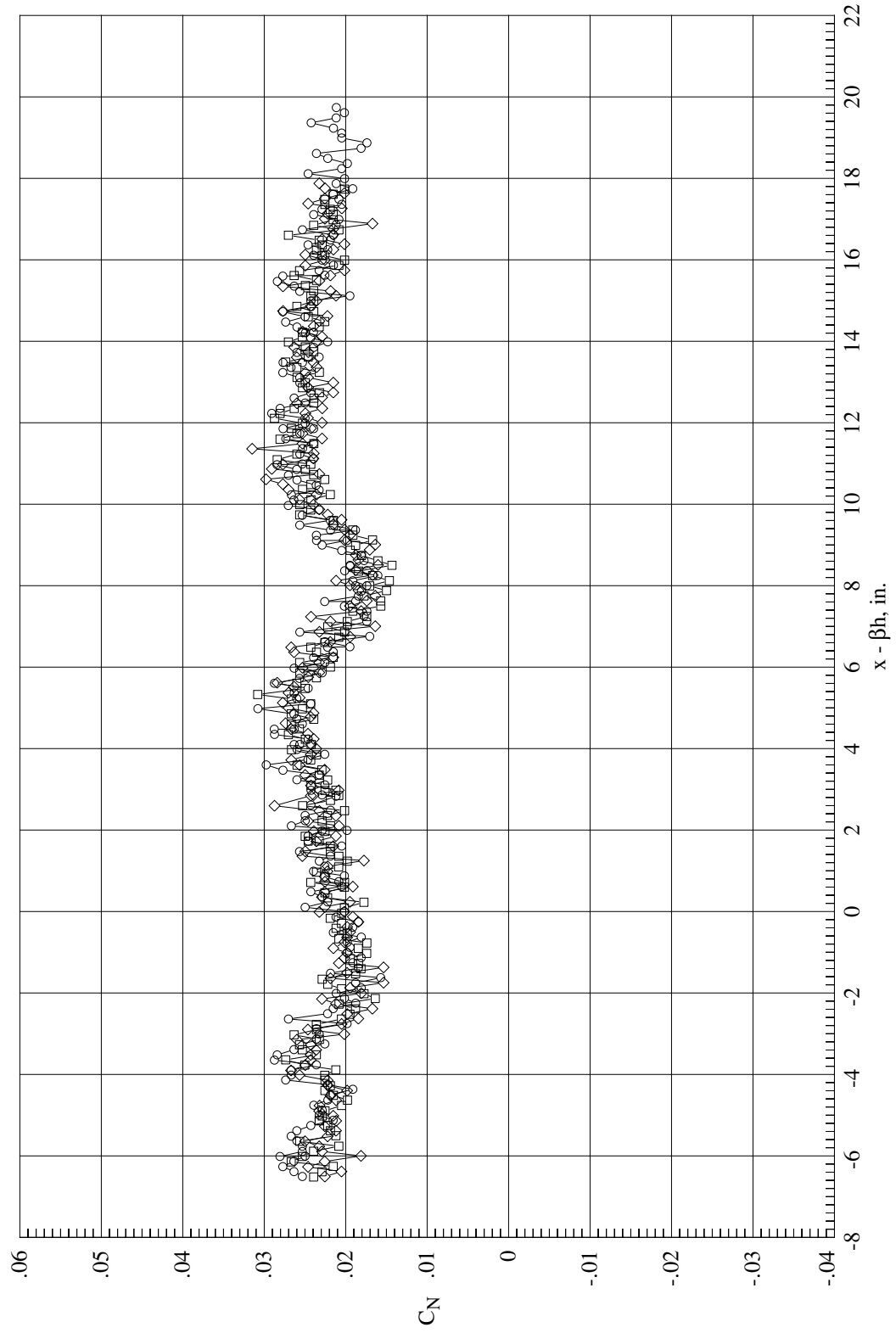


Figure 16.  $C_N$  variation for three back-to-back repeat runs.

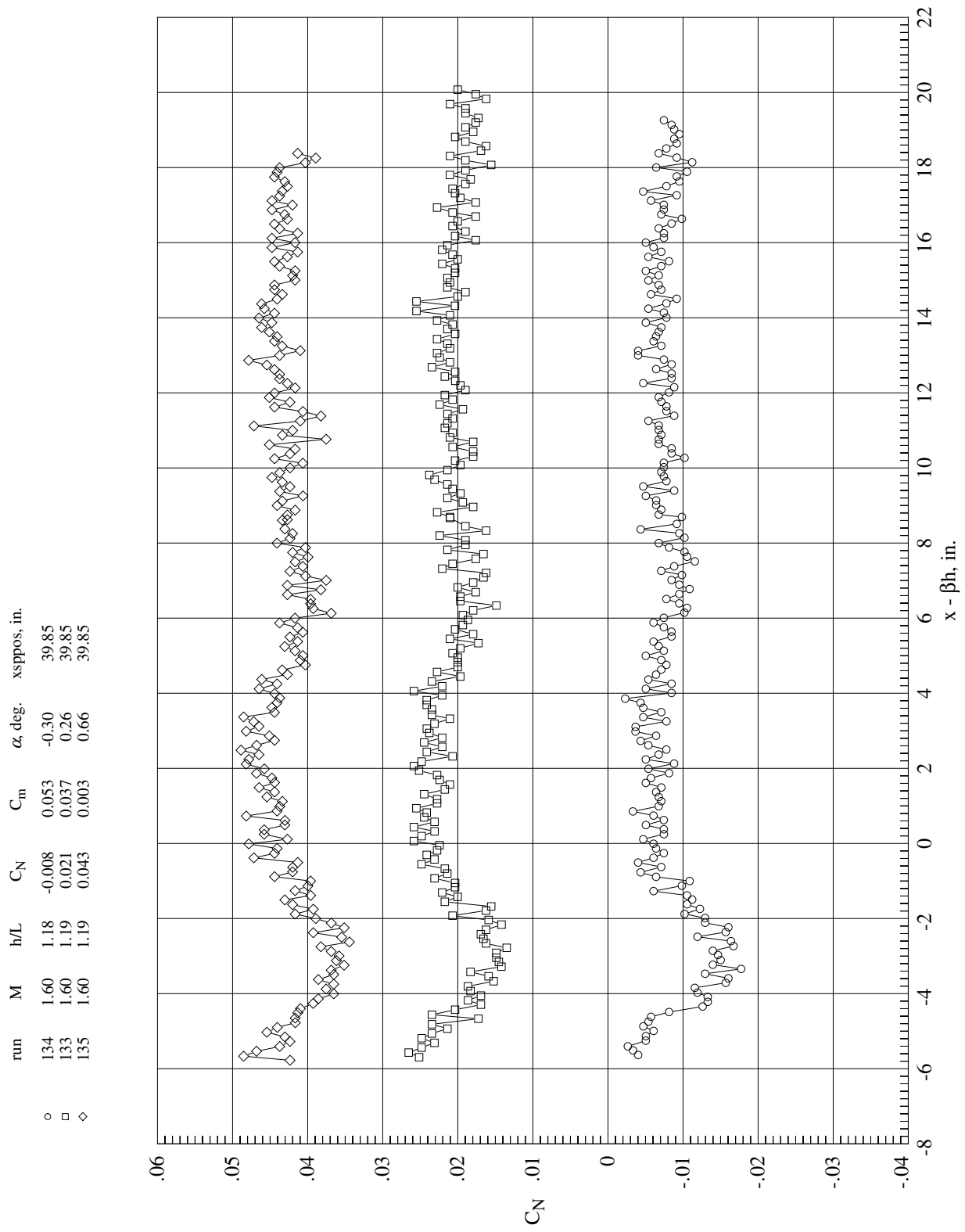


Figure 17.  $C_N$  variation at three angles of attack.

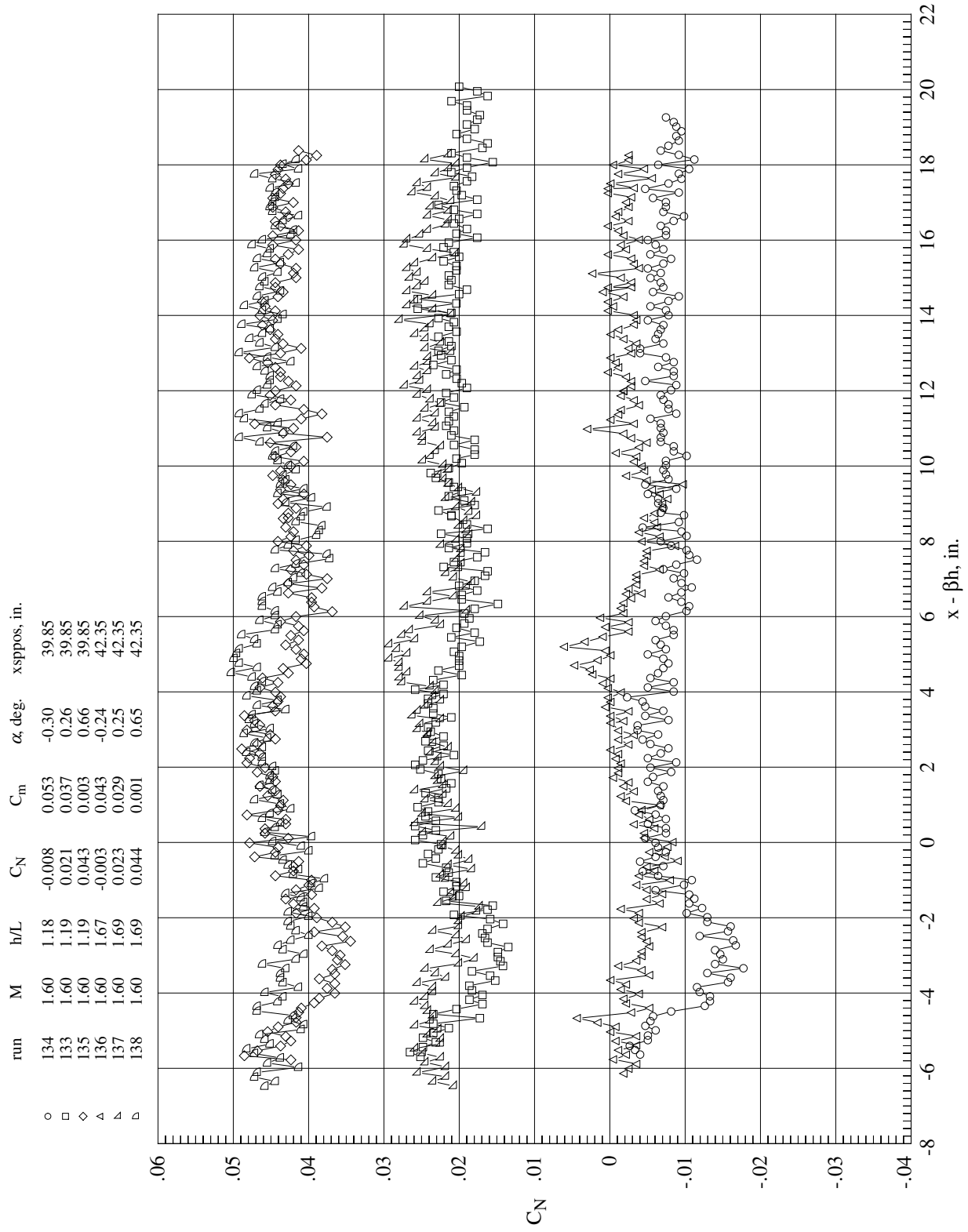
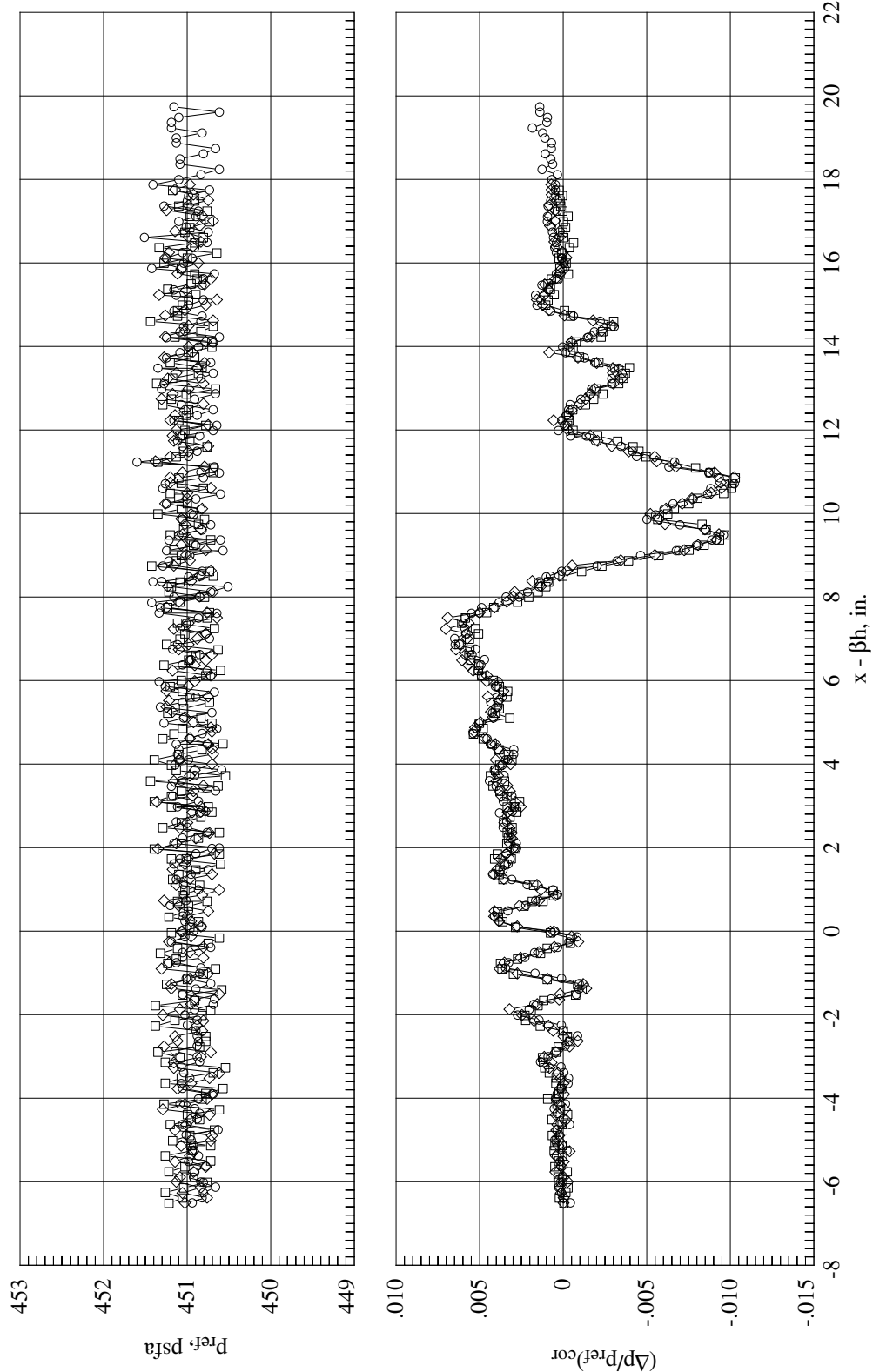


Figure 18.  $C_N$  variation at three angles of attack at  $h/L = 1.2$  and  $1.7$ .



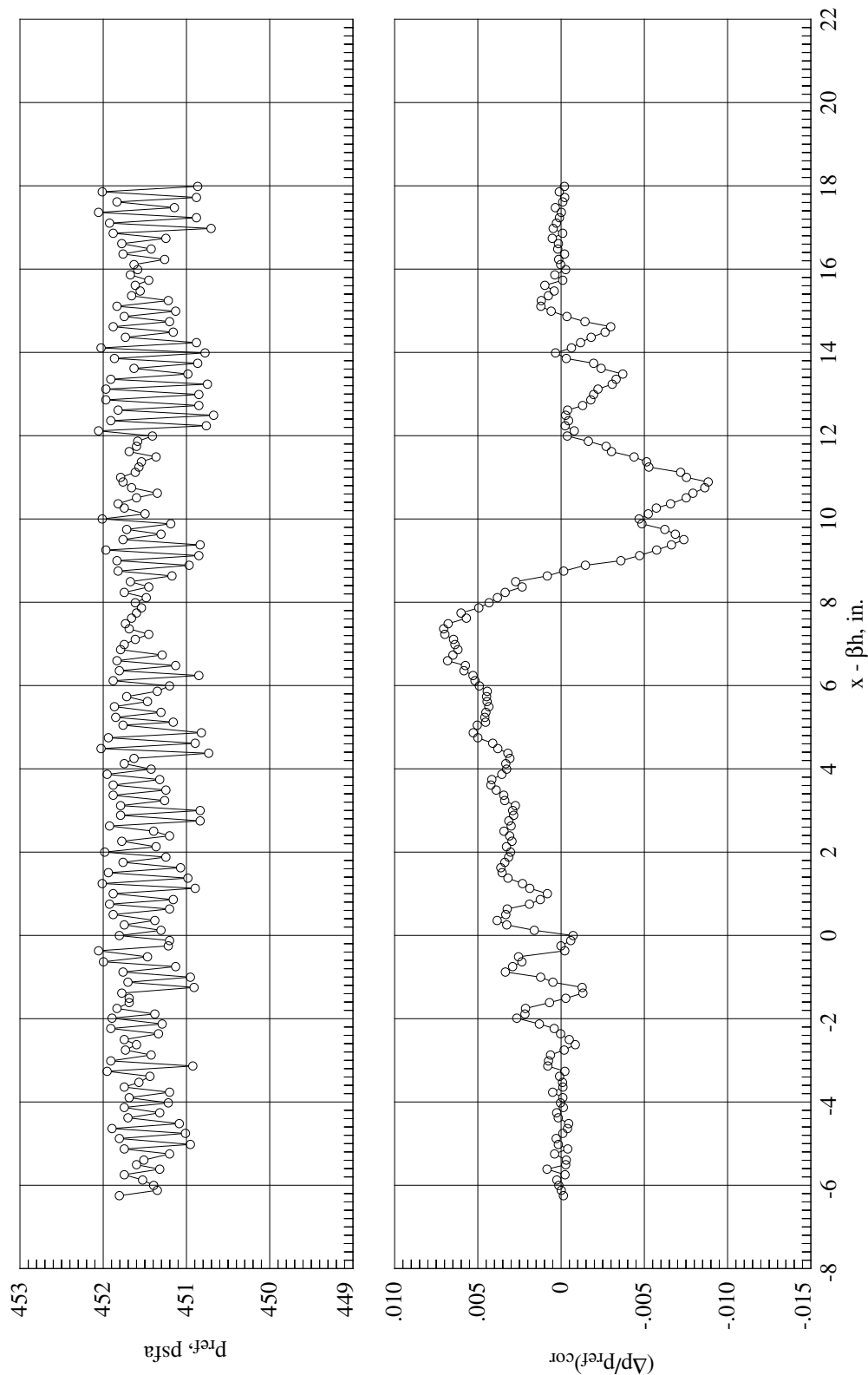
|   | run | M    | h/L  | C <sub>N</sub> | C <sub>m</sub> | α, deg. | xspos, in. |
|---|-----|------|------|----------------|----------------|---------|------------|
| ○ | 201 | 1.60 | 1.69 | 0.023          | 0.055          | 0.29    | 42.35      |
| □ | 202 | 1.60 | 1.69 | 0.023          | 0.057          | 0.29    | 42.35      |
| ◇ | 203 | 1.60 | 1.69 | 0.023          | 0.056          | 0.28    | 42.35      |



(a) Typical  $p_{ref}$  variation.

Figure 19. Variation of  $p_{ref}$  during sonic boom pressure signature runs.

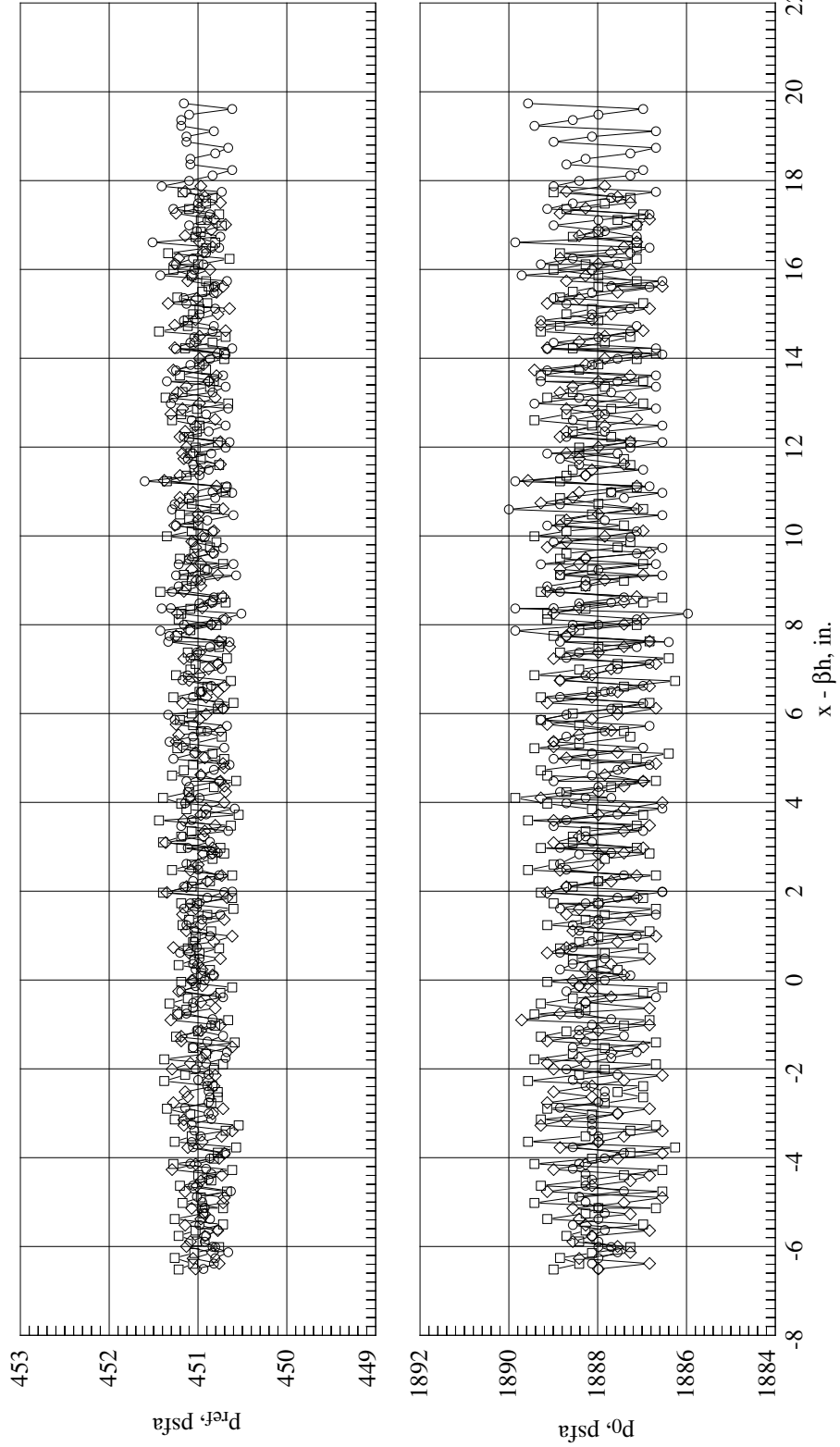
|     |      |      |       |       |               |             |
|-----|------|------|-------|-------|---------------|-------------|
| run | M    | h/L  | $C_N$ | $C_m$ | $\alpha$ deg. | xsppos, in. |
| 150 | 1.60 | 1.68 | 0.021 | 0.029 | 0.23          | 44.35       |



(b) Larger than typical  $p_{ref}$  variation.

Figure 19. Concluded.

| run | M   | h/L  | C <sub>N</sub> | C <sub>m</sub> | $\alpha$ , deg. | xspos, in. |
|-----|-----|------|----------------|----------------|-----------------|------------|
| ○   | 201 | 1.60 | 0.023          | 0.055          | 0.29            | 42.35      |
| □   | 202 | 1.60 | 0.023          | 0.057          | 0.29            | 42.35      |
| ◇   | 203 | 1.60 | 0.023          | 0.056          | 0.28            | 42.35      |

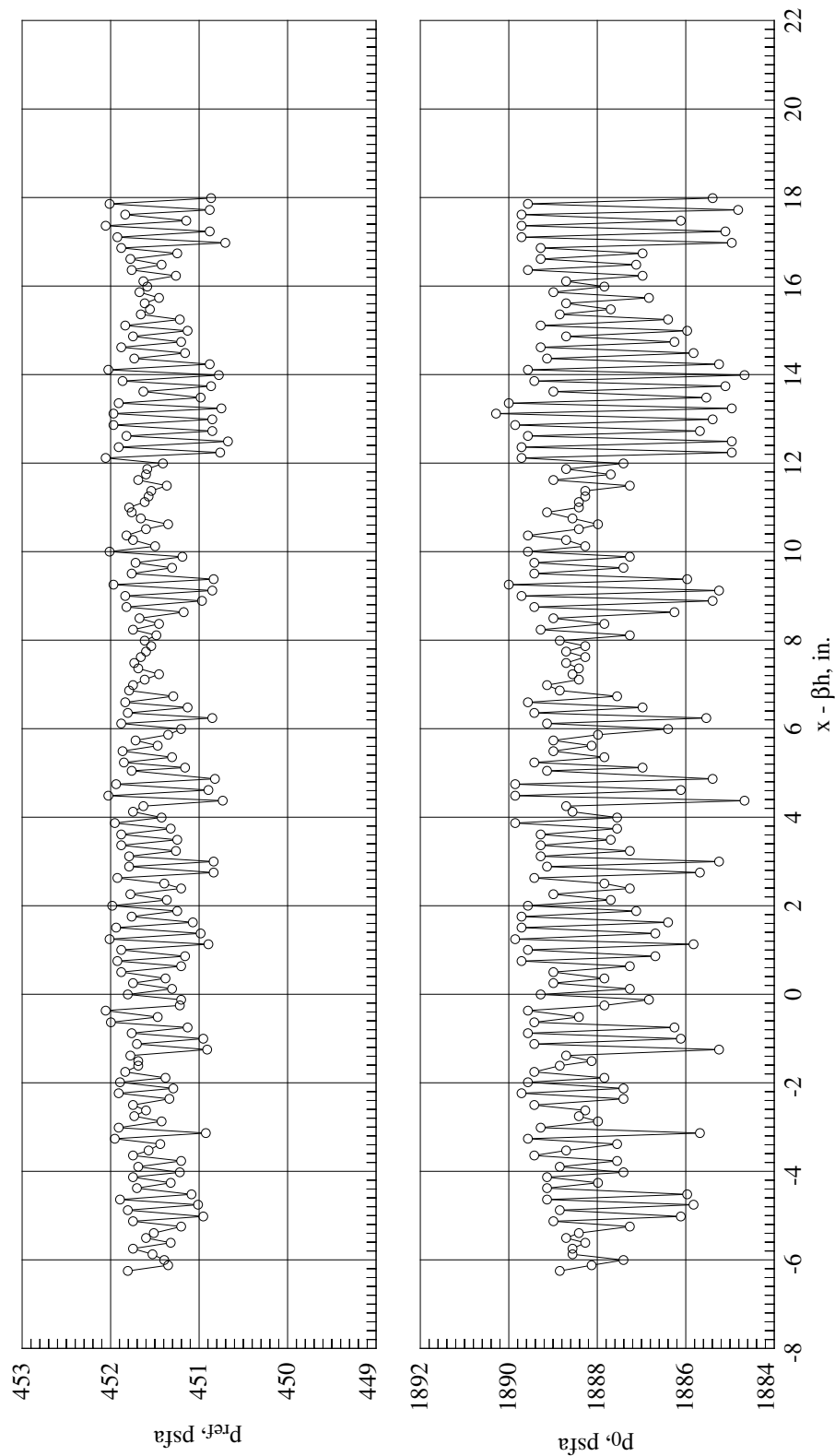


(a) Typical  $p_{ref}$  variation.

Figure 20. Variation of  $p_{ref}$  and  $p_0$  during sonic boom pressure signature runs.

| run | M    | h/L  | $C_N$ | $C_m$ | $\alpha$ deg. | xsppos, in. |
|-----|------|------|-------|-------|---------------|-------------|
| 150 | 1.60 | 1.68 | 0.021 | 0.029 | 0.23          | 44.35       |

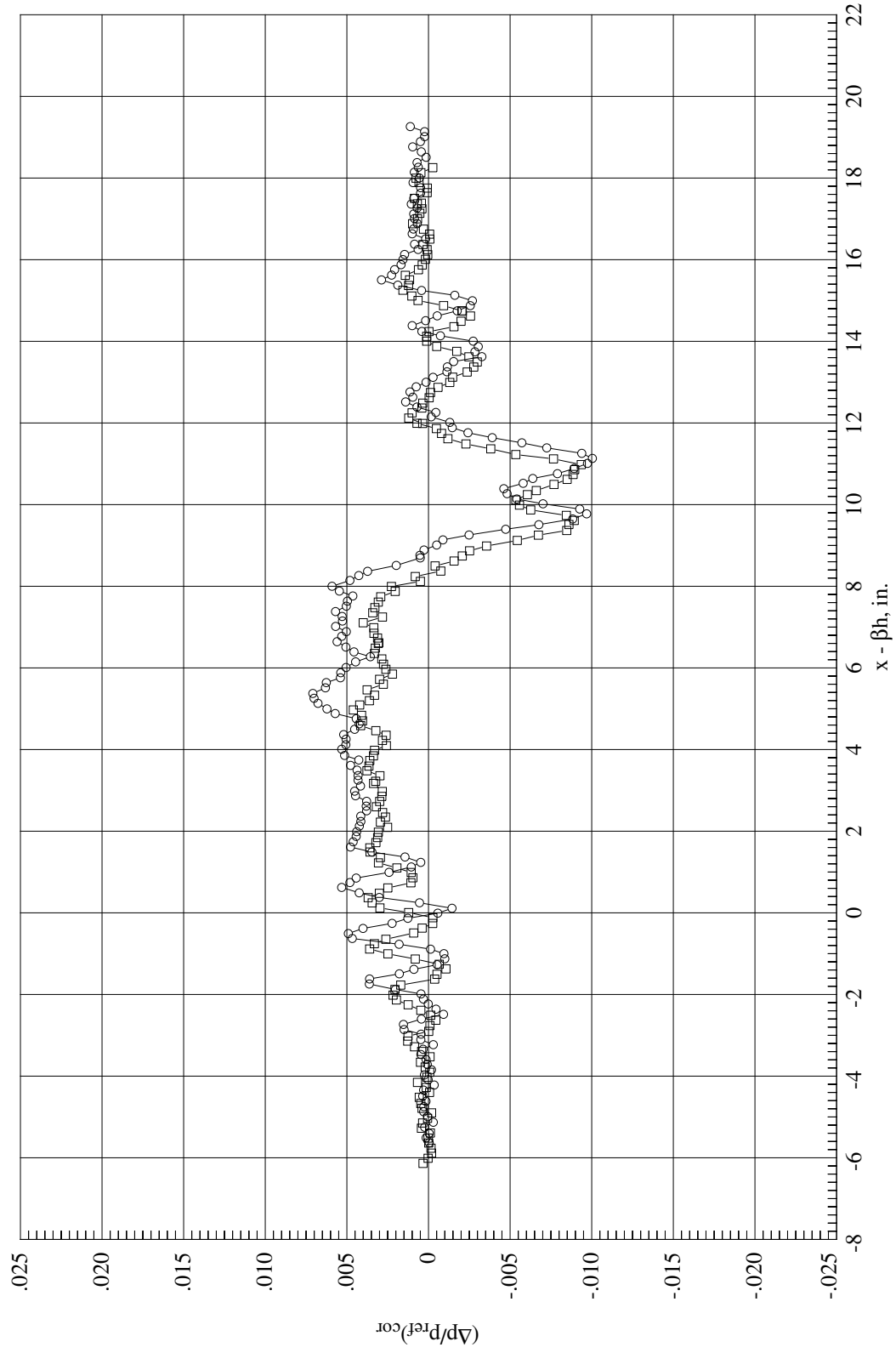
o



(b) Larger than typical  $p_{ref}$  variation.

Figure 20. Concluded.

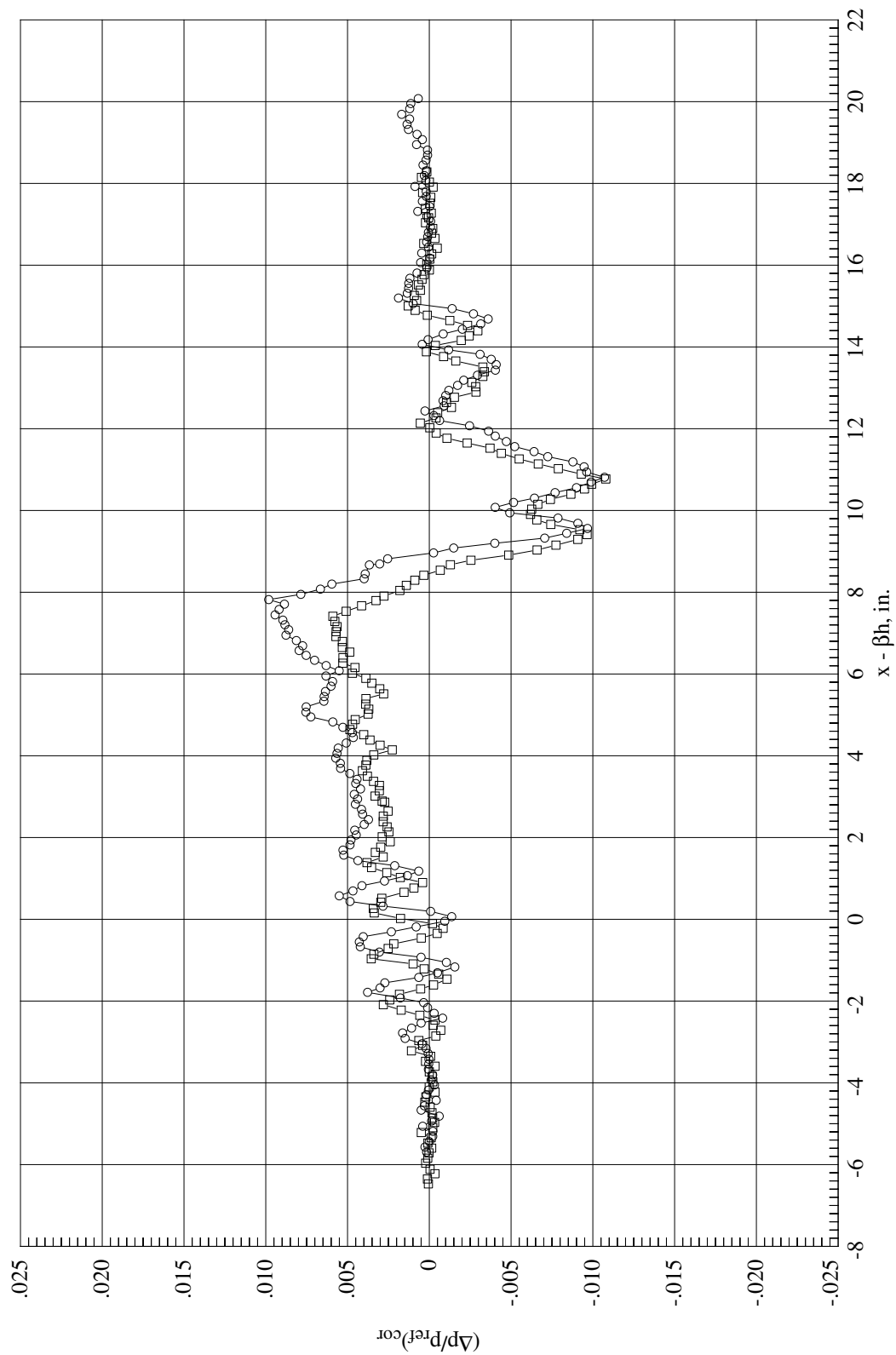
| run | M    | h/L  | C <sub>N</sub> | C <sub>m</sub> | $\alpha$ , deg. | x <sub>spos</sub> , in. |
|-----|------|------|----------------|----------------|-----------------|-------------------------|
| ○   | 1.34 | 1.18 | -0.008         | 0.053          | -0.30           | 39.85                   |
| □   | 1.36 | 1.67 | -0.003         | 0.043          | -0.24           | 42.35                   |



(a)  $\alpha = -0.26^\circ$ .

Figure 21. Effect of  $h/L$  on sonic boom pressure signatures.

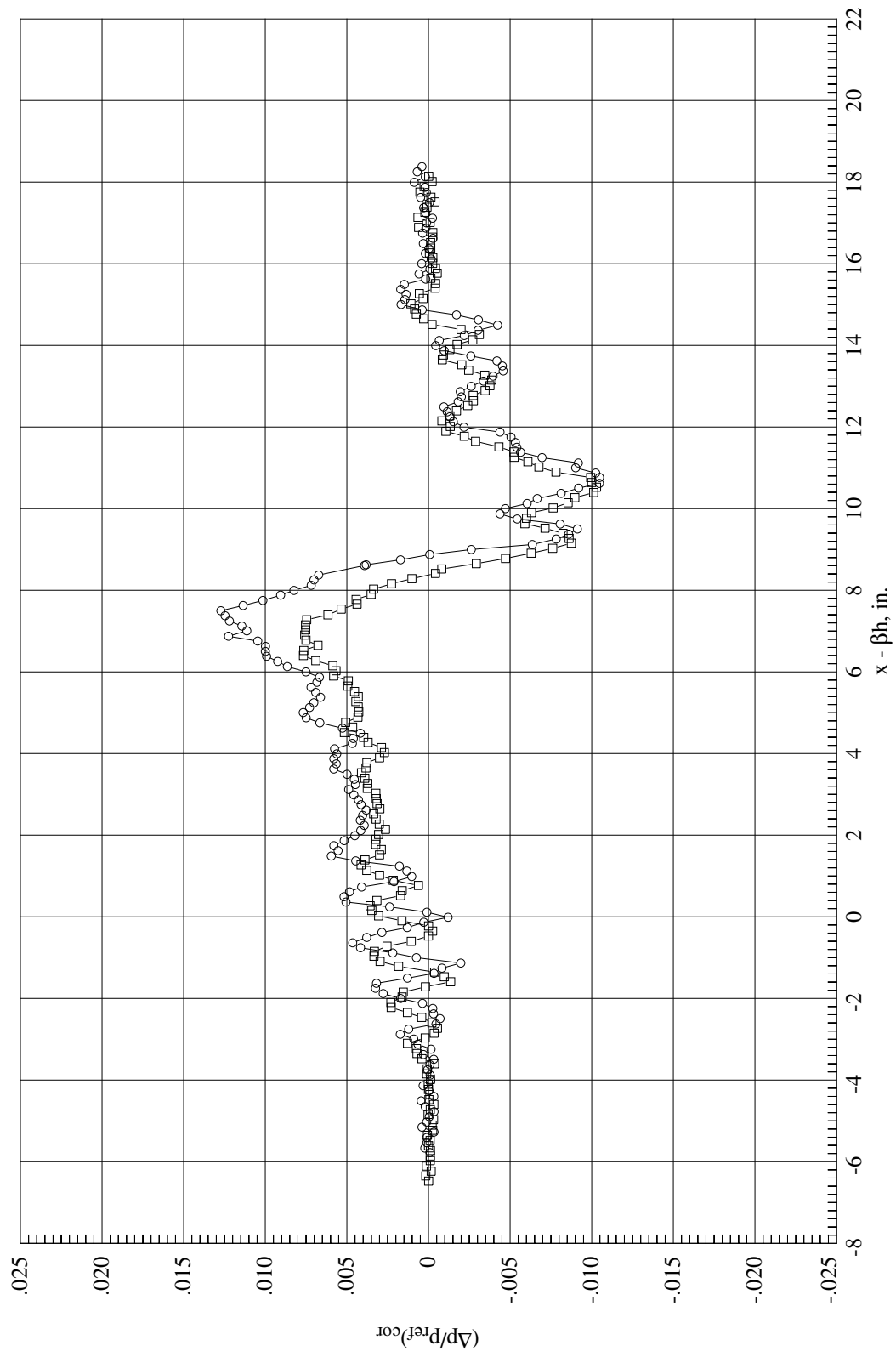
|   | run | M    | h/L  | C <sub>N</sub> | C <sub>m</sub> | α, deg. | xsp <sub>pos</sub> , in. |
|---|-----|------|------|----------------|----------------|---------|--------------------------|
| ○ | 133 | 1.60 | 1.19 | 0.021          | 0.037          | 0.26    | 39.85                    |
| □ | 137 | 1.60 | 1.69 | 0.023          | 0.029          | 0.25    | 42.35                    |



(b)  $\alpha = 0.26^\circ$ .

Figure 21. Continued.

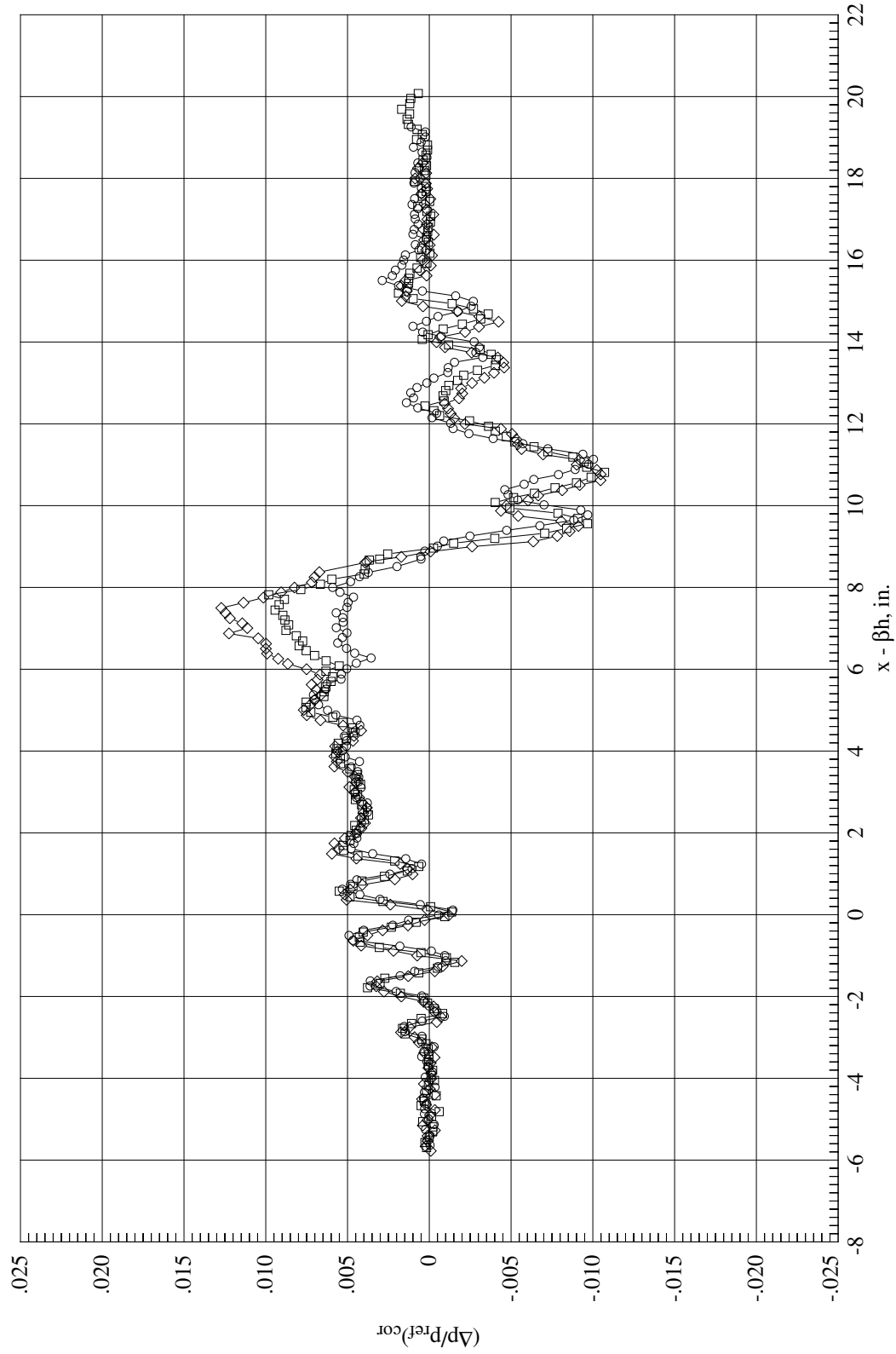
| run | M   | h/L  | $C_N$ | $C_m$ | $\alpha$ deg. | xsppos, in. |
|-----|-----|------|-------|-------|---------------|-------------|
| ○   | 135 | 1.60 | 1.19  | 0.003 | 0.66          | 39.85       |
| □   | 138 | 1.60 | 1.69  | 0.001 | 0.65          | 42.35       |



(c)  $\alpha = 0.68^\circ$ .

Figure 21. Concluded.

| run | M    | h/L  | C <sub>N</sub> | C <sub>m</sub> | $\alpha$ , deg. | x <sub>sppos</sub> , in. |
|-----|------|------|----------------|----------------|-----------------|--------------------------|
| ○   | 1.34 | 1.18 | -0.008         | 0.053          | -0.30           | 39.85                    |
| □   | 1.33 | 1.19 | 0.021          | 0.037          | 0.26            | 39.85                    |
| ◇   | 1.35 | 1.19 | 0.043          | 0.003          | 0.66            | 39.85                    |

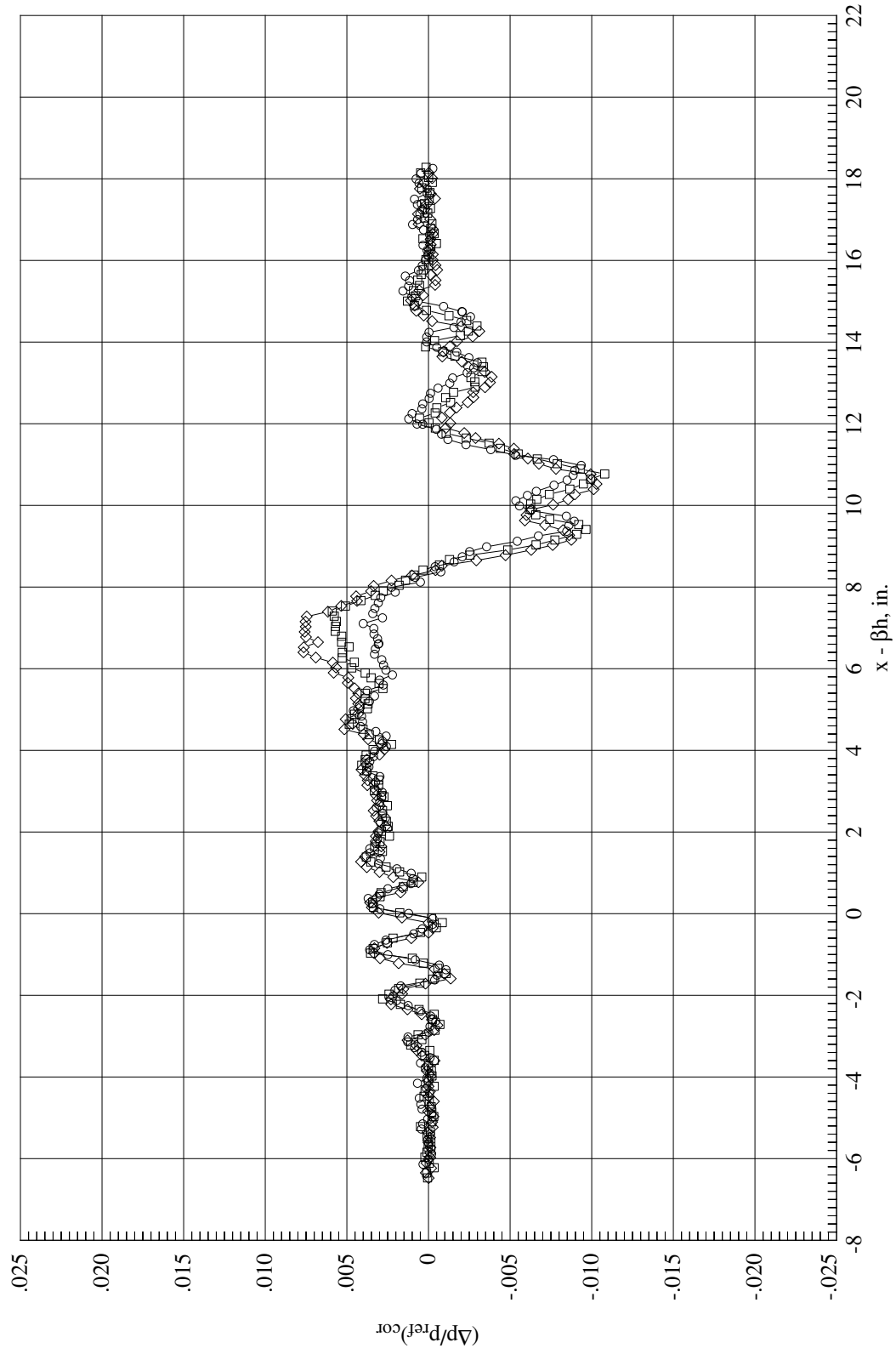


(a)  $M = 1.60$  and  $h/L = 1.2$ .

Figure 22. Effect of angle of attack on sonic boom pressure signatures. Model without boundary layer transition grit.



| run | M    | h/L  | C <sub>N</sub> | C <sub>m</sub> | $\alpha$ , deg. | x <sub>sppos</sub> , in. |
|-----|------|------|----------------|----------------|-----------------|--------------------------|
| ○   | 1.60 | 1.67 | -0.003         | 0.043          | -0.24           | 42.35                    |
| □   | 1.60 | 1.69 | 0.023          | 0.029          | 0.25            | 42.35                    |
| ◇   | 1.60 | 1.69 | 0.044          | 0.001          | 0.65            | 42.35                    |

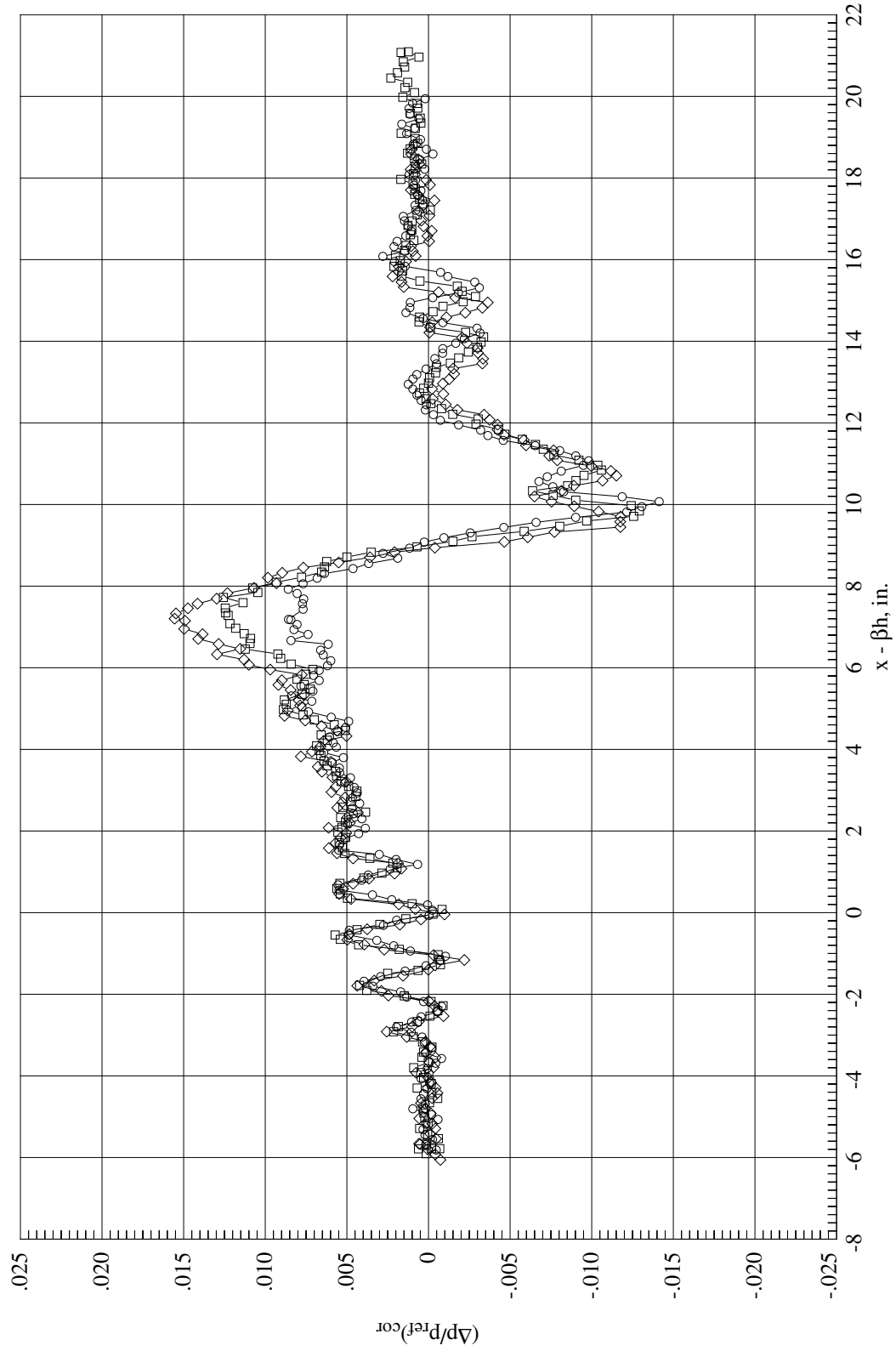


(b)  $M = 1.60$  and  $h/L = 1.7$ .

Figure 22. Continued.

run M h/L C<sub>N</sub> C<sub>m</sub> α, deg. xspos, in.

|   |     |      |      |        |       |       |       |
|---|-----|------|------|--------|-------|-------|-------|
| ○ | 144 | 1.80 | 1.18 | -0.016 | 0.029 | -0.25 | 42.35 |
| □ | 142 | 1.80 | 1.18 | 0.009  | 0.007 | 0.28  | 42.35 |
| ◇ | 143 | 1.80 | 1.19 | 0.025  | 0.002 | 0.63  | 42.35 |



(c)  $M = 1.80$  and  $h/L = 1.2$ .

Figure 22. Concluded.

| run | M    | h/L  | C <sub>N</sub> | C <sub>m</sub> | $\alpha$ , deg. | x <sub>sppos</sub> , in. |
|-----|------|------|----------------|----------------|-----------------|--------------------------|
| ○   | 1.60 | 1.67 | 0.007          | 0.031          | -0.24           | 42.35                    |
| □   | 1.60 | 1.69 | 0.035          | 0.011          | 0.30            | 42.35                    |
| ◇   | 1.60 | 1.69 | 0.049          | 0.009          | 0.66            | 42.35                    |

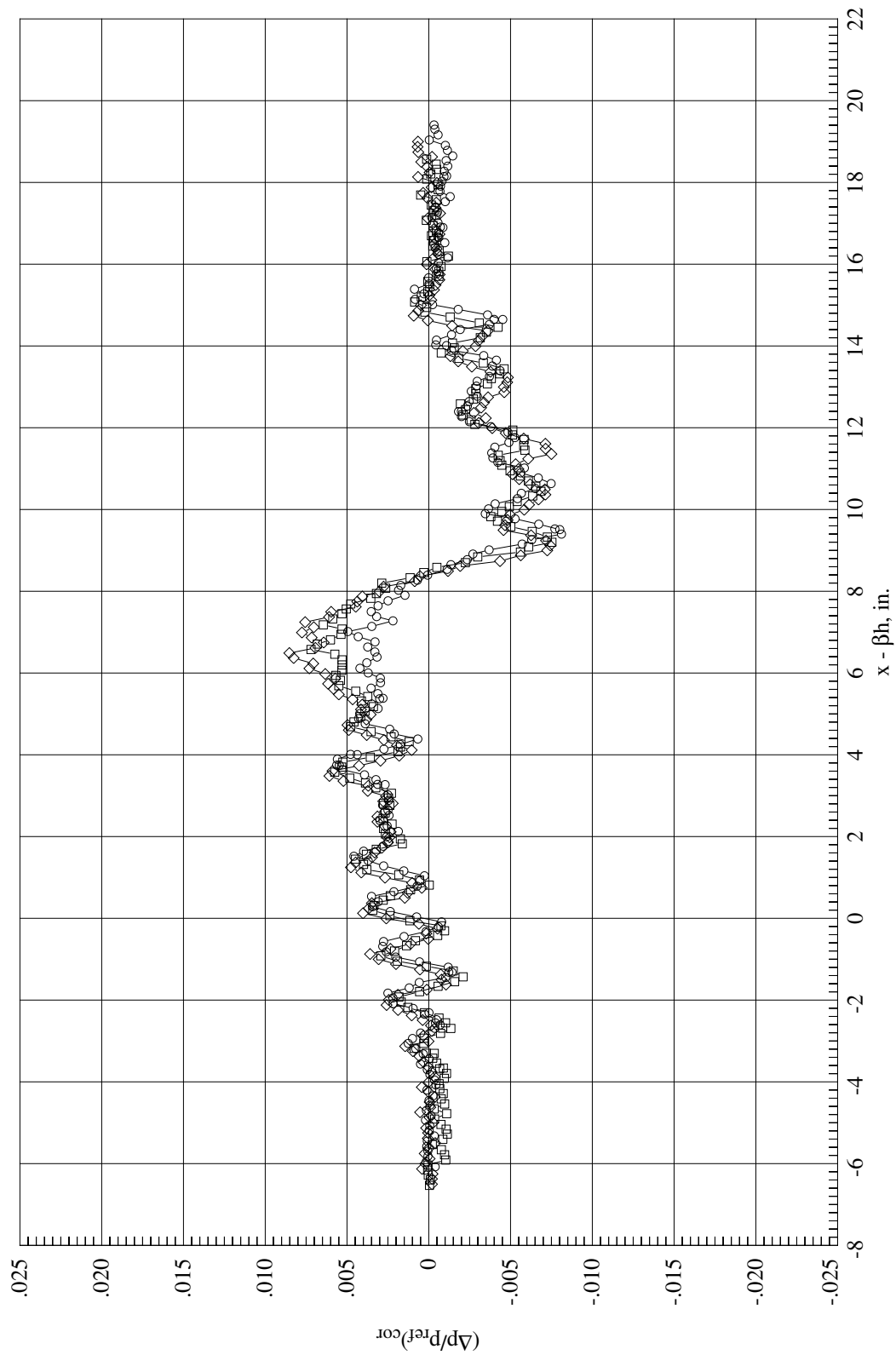


Figure 23. Effect of angle of attack on sonic boom pressure signatures. Model with boundary layer transition grit.

| run | M    | h/L  | C <sub>N</sub> | C <sub>m</sub> | $\alpha$ deg. | x <sub>sppos</sub> , in. |
|-----|------|------|----------------|----------------|---------------|--------------------------|
| ○   | 1.60 | 1.68 | 0.021          | 0.031          | 0.24          | 40.35                    |
| □   | 1.60 | 1.68 | 0.021          | 0.032          | 0.23          | 42.34                    |
| ◇   | 1.60 | 1.68 | 0.021          | 0.029          | 0.23          | 44.35                    |

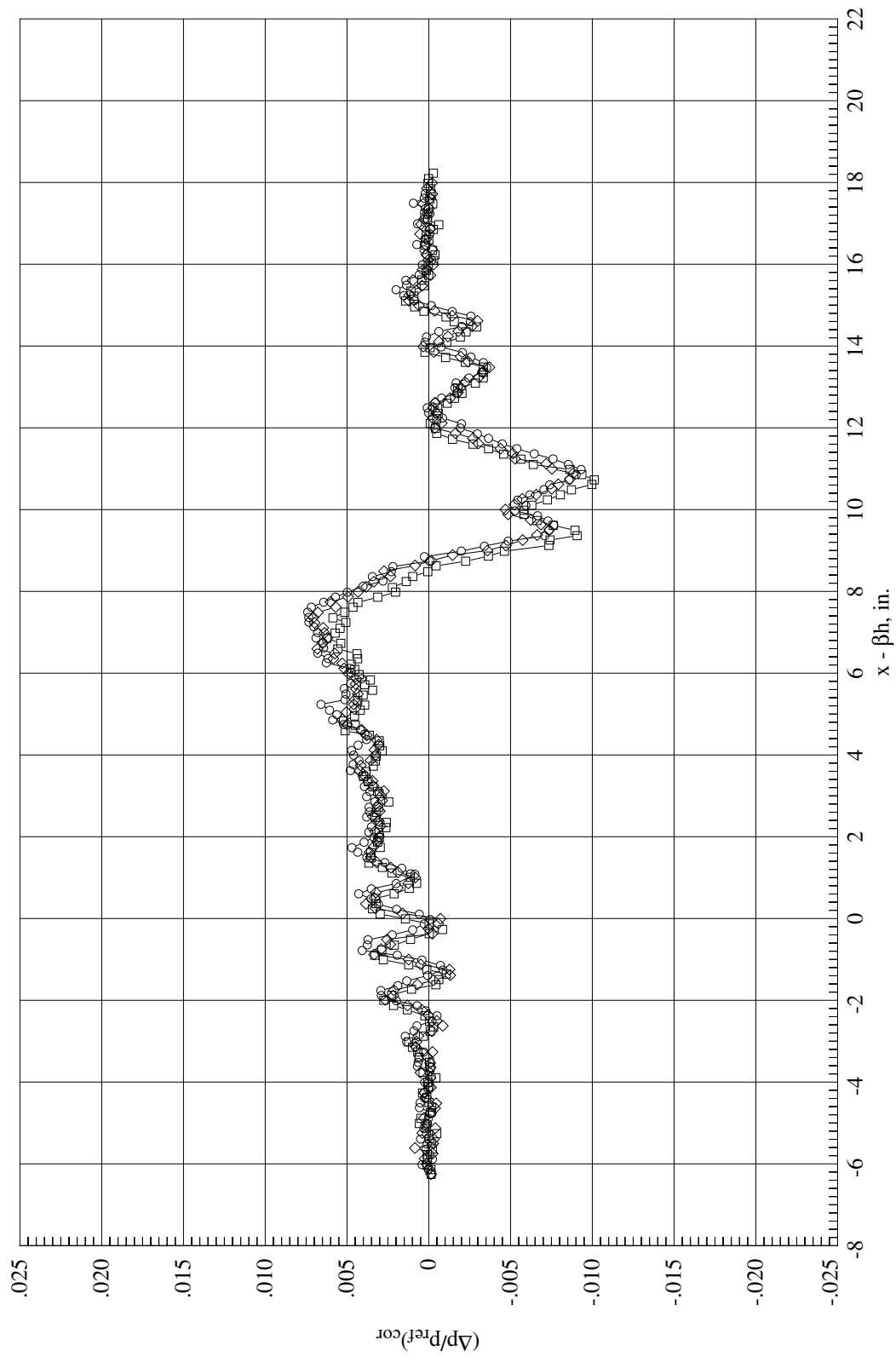
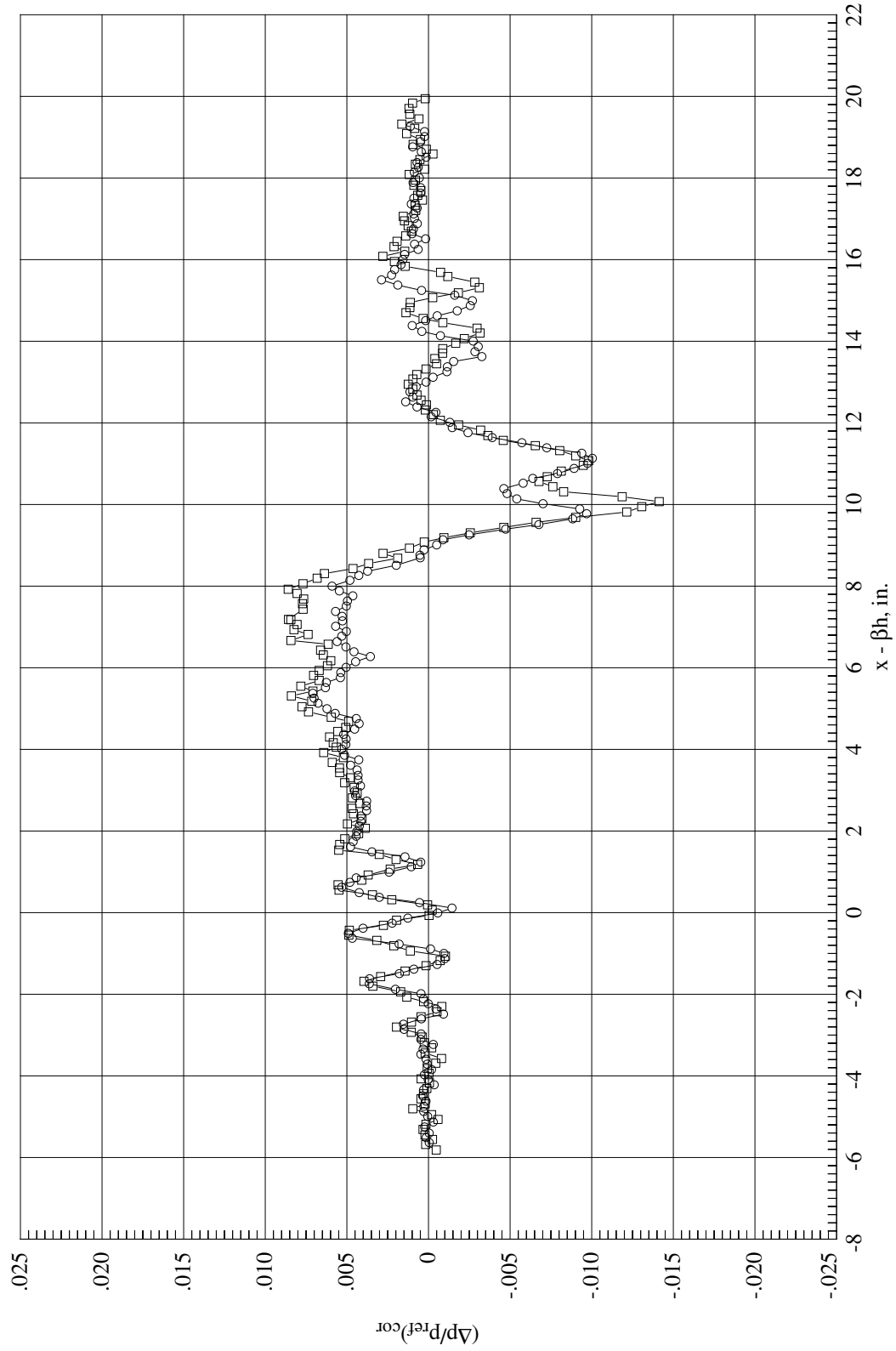


Figure 24. Effect of survey probe position on sonic boom pressure signatures.

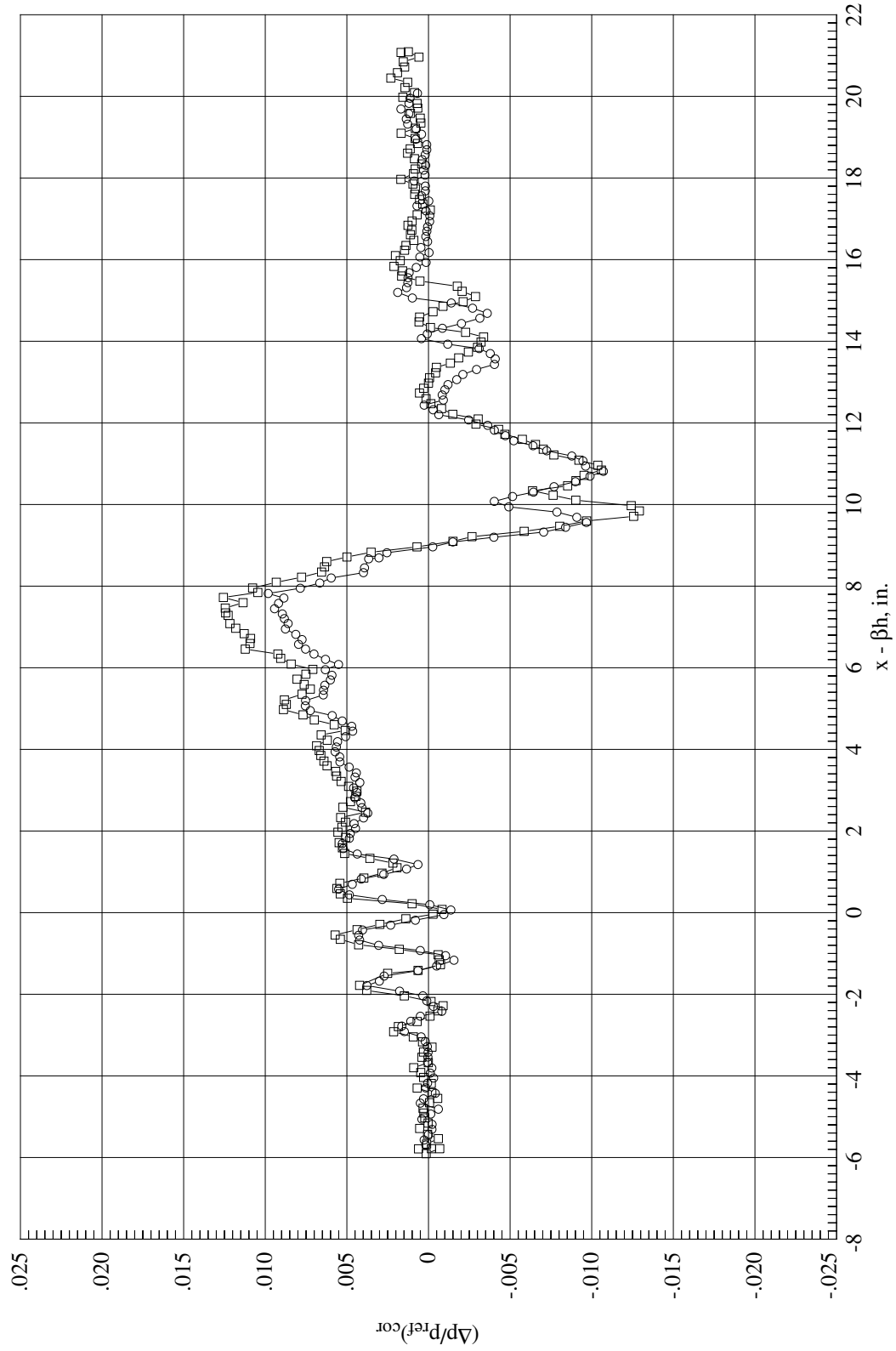
| run | M    | h/L  | $C_N$  | $C_m$ | $\alpha$ , deg. | xsppos, in. |
|-----|------|------|--------|-------|-----------------|-------------|
| ○   | 1.34 | 1.18 | -0.008 | 0.053 | -0.30           | 39.85       |
| □   | 1.44 | 1.18 | -0.016 | 0.029 | -0.25           | 42.35       |



(a)  $\alpha = -0.26$ .

Figure 25. Effect of Mach number on sonic boom pressure signatures.

| run | M    | h/L  | C <sub>N</sub> | C <sub>m</sub> | $\alpha$ , deg. | x <sub>spos</sub> , in. |
|-----|------|------|----------------|----------------|-----------------|-------------------------|
| ○   | 1.33 | 1.19 | 0.021          | 0.037          | 0.26            | 39.85                   |
| □   | 1.42 | 1.18 | 0.009          | 0.007          | 0.28            | 42.35                   |

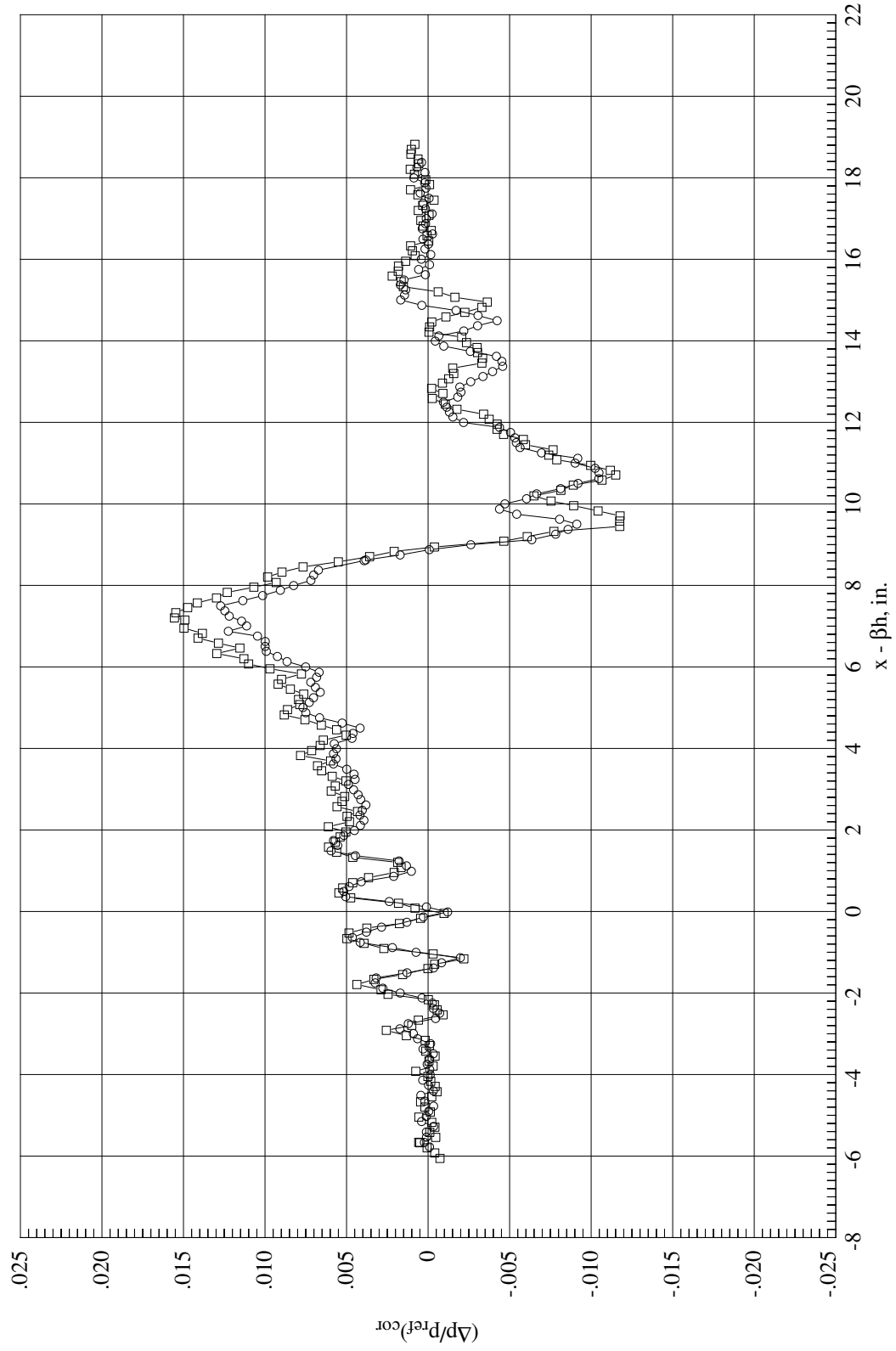


(b)  $\alpha = 0.26$ .

Figure 25. Continued.

run      M      h/L       $C_N$        $C_m$        $\alpha$ , deg.      xspos, in.

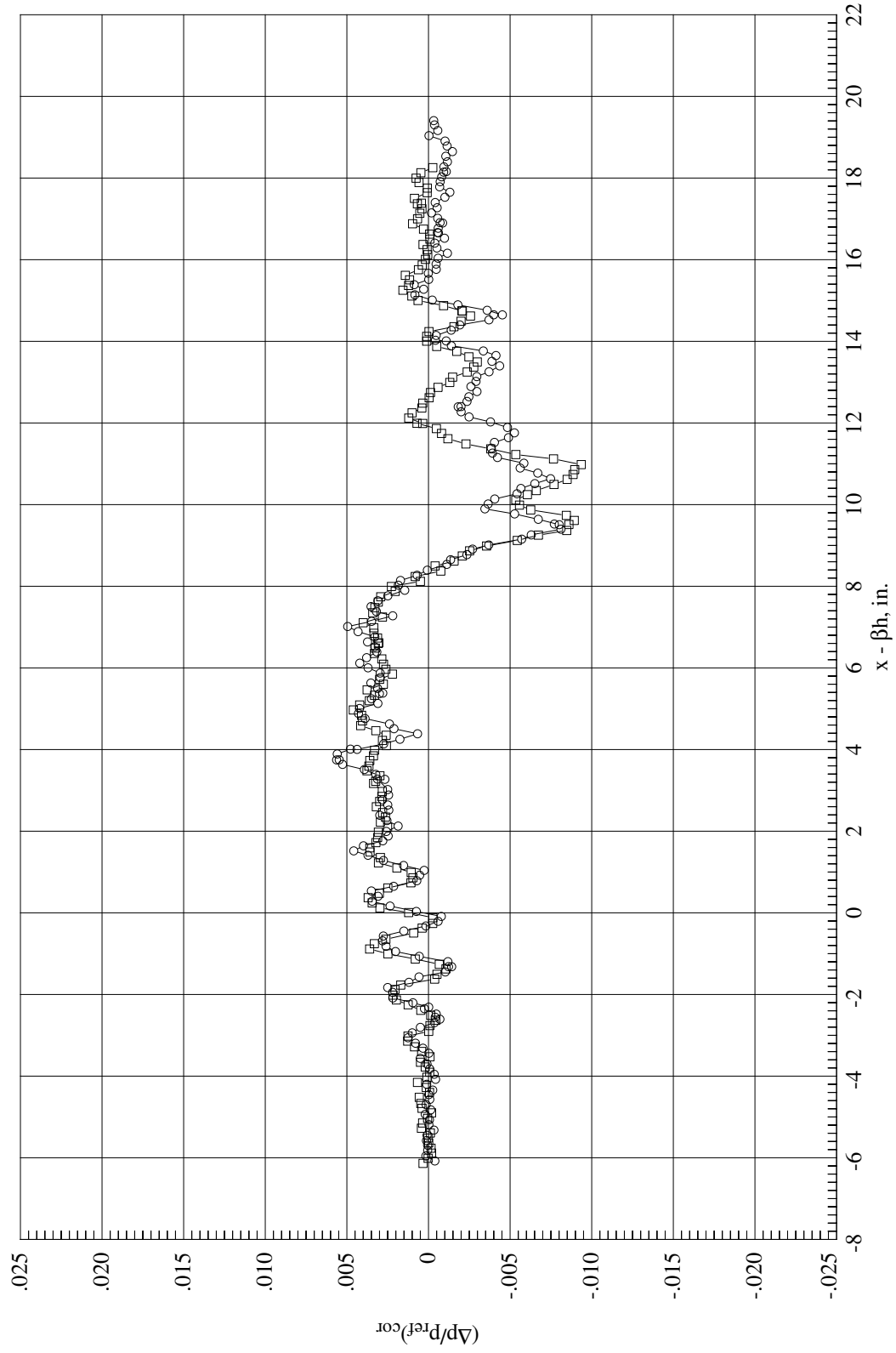
|   |     |      |      |       |       |      |       |
|---|-----|------|------|-------|-------|------|-------|
| ○ | 135 | 1.60 | 1.19 | 0.043 | 0.003 | 0.66 | 39.85 |
| □ | 143 | 1.80 | 1.19 | 0.025 | 0.002 | 0.63 | 42.35 |



(c)  $\alpha = 0.68$ .

Figure 25. Concluded.

| run | M   | h/L  | $C_N$ | $C_m$ | $\alpha$ , deg. | xspos, in. | grit on<br>grit off |
|-----|-----|------|-------|-------|-----------------|------------|---------------------|
| ○   | 196 | 1.60 | 1.67  | 0.031 | 0.007           | -0.24      | 42.35               |
| □   | 136 | 1.60 | 1.67  | 0.043 | -0.003          | -0.24      | 42.35               |

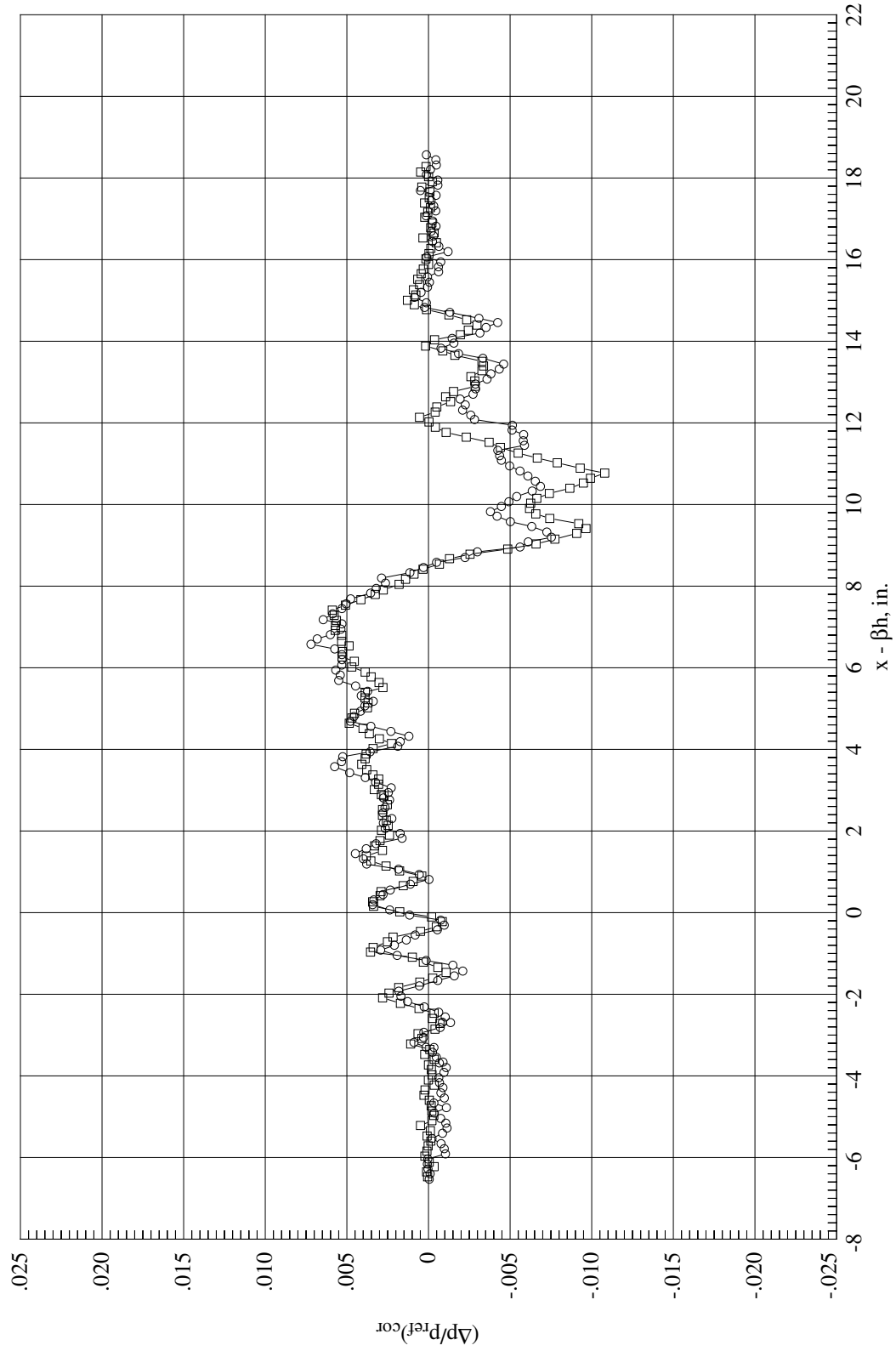


(a)  $\alpha = -0.26$ .

Figure 26. Effect of boundary layer transition grit on sonic boom pressure signatures.



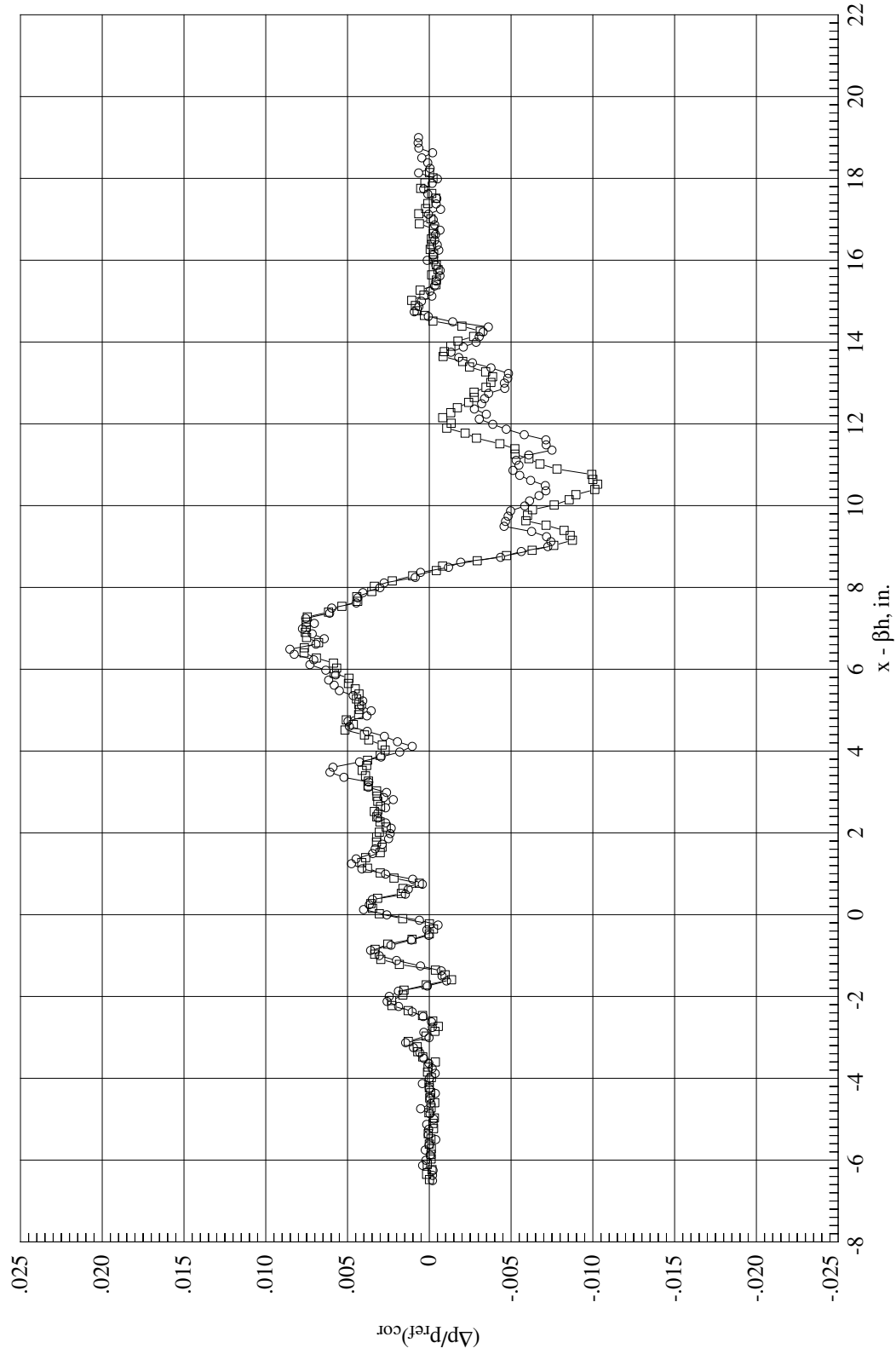
| run | M   | h/L  | $C_N$ | $C_m$ | $\alpha$ , deg. | xspos, in. | grit on | grit off |
|-----|-----|------|-------|-------|-----------------|------------|---------|----------|
| ○   | 197 | 1.60 | 1.69  | 0.035 | 0.011           | 0.30       | 42.35   |          |
| □   | 137 | 1.60 | 1.69  | 0.029 | 0.023           | 0.25       | 42.35   |          |



(b)  $\alpha = 0.26$ .

Figure 26. Continued.

| run | M   | h/L  | C <sub>N</sub> | C <sub>m</sub> | $\alpha$ , deg. | xsppos, in. | grit on | grit off |
|-----|-----|------|----------------|----------------|-----------------|-------------|---------|----------|
| ○   | 198 | 1.60 | 1.69           | 0.009          | 0.66            | 42.35       |         |          |
| □   | 138 | 1.60 | 1.69           | 0.001          | 0.65            | 42.35       |         |          |



(c)  $\alpha = 0.68$ .

Figure 26. Concluded.

## Appendix A

### Tabulated Data

The tabulated data from the wind tunnel test is contained in this Appendix. A run log is presented below in Table A1 that shows the run number followed by the table number in parentheses for the corresponding model  $h/L$  (model nose to survey probe separation distance parameter) and angles of attack investigated. The angles of attack shown in the table are the nominal values. Although all of the runs obtained at  $M = 1.60$  and  $\alpha = 0.26^\circ$  (grit off) appear to be repeat runs, the position of the survey probes ( $xsppos$ ) varied between some of the runs as shown in table A2.

Table A1. Index to tabulated data.

| $h/L$ | Run number (table number) @ nominal $\alpha$ of – |  |                        | Comments              |
|-------|---|--|------------------------|-----------------------|
|       | $-0.26^\circ$                                     | $0.26^\circ$   | $0.68^\circ$           |                       |
| 0.5   | 141 <sup>1</sup> (A11)                            | 140 <sup>1</sup> (A10)   | 139 <sup>1</sup> (A9)  | $M = 1.60$ ; grit off |
| 1.2   | 134 (A4)  | 133 (A3)   | 135 (A5)               |                       |
| 1.7   | 136(A6)   | 137 (A7), 148 (A15), 149 (A16), 150 (A17)<br>160 (A18), 201 <sup>2</sup> (A22), 202 <sup>2</sup> (A23), 203 <sup>2</sup> (A24) | 138 (A8)               |                       |
| 1.2   | 144 (A14)   | 142 (A12)  | 143 (A13)              | $M = 1.80$ ; grit off |
| 1.7   | 196 <sup>2</sup> (A19)                            | 197 <sup>2</sup> (A20)   | 198 <sup>2</sup> (A21) | $M = 1.60$ ; grit on  |

(<sup>1</sup>) Entire sonic boom signature not measured; signature starts near wing leading edge.

(<sup>2</sup>) Reference probe slightly bent and repaired before runs 196–198 and 201–203.

Table A2. Survey probe position ( $xsppos$ ) variation.

| Run | $xsppos$ (in.) |
|-----|----------------|
| 137 | 42.3           |
| 148 | 40.3           |
| 149 | 42.3           |
| 150 | 44.3           |
| 160 | 42.3           |
| 201 | 42.3           |
| 202 | 42.3           |
| 203 | 42.3           |

The nomenclature used in the following data tables (A3 – A24) is defined below in the order that they appear in the data tables.

|        |   |
|--------|---|
| Run    | Run number  |
| M      | Mach number   |
| xsppos | longitudinal distance from sidewall door leading edge to survey probes (see figure 4b), in.   |
| point  | point number  |
| p0     | free-stream stagnation pressure, psfa   |
| t0     | free-stream stagnation temperature, °F  |
| rnft   | free-stream unit Reynolds number $\times 10^{-6}$ , per ft  |
| alpha  | angle of attack, deg  |
| cnmrc  | normal force coefficient  |
| cmmrc  | pitching moment coefficient (at location 10.763 in. aft of model nose)  |
| $x$    | longitudinal distance from center pair of four orifices in survey probe to model nose measured parallel to tunnel sidewall (see figure 4a), in.   |
| h/L    | distance from model nose to on-track (centerline) survey probe measured perpendicular to tunnel sidewall divided by reference length (13.20 in.)  |
| xhbeta | model nose position parameter, $x - \beta h$ , inches; where $h$ is the distance from model nose to on-track (centerline) survey probe measured perpendicular to tunnel sidewall and $\beta = \sqrt{M^2 - 1}$ |
| pref   | measured reference probe pressure, psia   |
| dp01   | measured differential pressure between survey probe 1 (off-track) and reference probe (see figure 8), psia  |
| dp02   | measured differential pressure between survey probe 2 (on-track) and reference probe (see figure 8), psia   |
| dp03   | measured differential pressure between survey probe 3 (off-track) and reference probe (see figure 8), psia  |
| dpp01  | dp01/pref   |
| dpp02  | dp02/pref   |
| dpp03  | dp03/pref   |
| dpp01c | dpp01 - (dpp01) <sub>average of first five points</sub>   |
| dpp02c | dpp02 - (dpp02) <sub>average of first five points</sub>   |
| dpp03c | dpp03 - (dpp03) <sub>average of first five points</sub>   |

The model reference area and chord used to compute normal force and pitching moment coefficients were 0.060 ft<sup>2</sup> and 2.1029 in., respectively.

Table A3. Run 133.

Run = 133

M = 1.60

xspgos = 39.848

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 7327  | 1887.55 | 124.3 | 3.51 | 0.27  | 0.0252 | 0.0432 | 13.86 | 1.186 | -5.694 | 3.1369 | 0.00383  | -0.01952 | -0.03305 | 0.00122  | -0.00622 | -0.01053 | -0.00002 | 0.00016  | -0.00012 |
| 7328  | 1887.55 | 124.4 | 3.50 | 0.27  | 0.0265 | 0.0347 | 13.99 | 1.186 | -5.569 | 3.1360 | 0.00486  | -0.01920 | -0.03230 | 0.00155  | -0.00612 | -0.01030 | 0.00031  | 0.00026  | 0.00012  |
| 7329  | 1887.84 | 124.3 | 3.51 | 0.26  | 0.0248 | 0.0365 | 14.11 | 1.186 | -5.437 | 3.1365 | 0.00345  | -0.02002 | -0.03182 | 0.00110  | -0.00638 | -0.01015 | -0.00014 | 0.00000  | 0.00027  |
| 7330  | 1887.26 | 124.3 | 3.50 | 0.26  | 0.0231 | 0.0356 | 14.24 | 1.186 | -5.311 | 3.1359 | 0.00450  | -0.02068 | -0.03144 | 0.00144  | -0.00660 | -0.01003 | 0.00020  | -0.00021 | 0.00039  |
| 7331  | 1888.27 | 124.4 | 3.51 | 0.26  | 0.0248 | 0.0337 | 14.36 | 1.186 | -5.188 | 3.1383 | 0.00282  | -0.02073 | -0.03480 | 0.00090  | -0.00661 | -0.01109 | -0.00034 | -0.00022 | -0.00067 |
| 7332  | 1888.13 | 124.2 | 3.51 | 0.26  | 0.0234 | 0.0329 | 14.49 | 1.186 | -5.062 | 3.1376 | 0.00426  | -0.01877 | -0.03254 | 0.00136  | -0.00598 | -0.01037 | 0.00012  | 0.00040  | 0.00005  |
| 7333  | 1887.84 | 124.1 | 3.51 | 0.26  | 0.0214 | 0.0402 | 14.61 | 1.185 | -4.933 | 3.1372 | 0.00416  | -0.02047 | -0.03279 | 0.00132  | -0.00653 | -0.01045 | 0.00008  | -0.00014 | -0.00003 |
| 7334  | 1887.98 | 124.2 | 3.51 | 0.26  | 0.0234 | 0.0376 | 14.74 | 1.186 | -4.816 | 3.1384 | 0.00477  | -0.02194 | -0.03387 | 0.00152  | -0.00699 | -0.01079 | 0.00028  | -0.00061 | -0.00037 |
| 7335  | 1887.70 | 124.2 | 3.51 | 0.24  | 0.0173 | 0.0454 | 14.86 | 1.185 | -4.668 | 3.1355 | 0.00520  | -0.01846 | -0.03202 | 0.00166  | -0.00589 | -0.01021 | 0.00042  | 0.00050  | 0.00021  |
| 7336  | 1887.98 | 124.2 | 3.51 | 0.26  | 0.0234 | 0.0367 | 14.99 | 1.186 | -4.562 | 3.1366 | 0.00464  | -0.01908 | -0.03172 | 0.00148  | -0.00608 | -0.01011 | 0.00024  | 0.00030  | 0.00031  |
| 7337  | 1887.70 | 124.2 | 3.51 | 0.25  | 0.0204 | 0.0396 | 15.11 | 1.185 | -4.428 | 3.1383 | 0.00293  | -0.02135 | -0.03328 | 0.00093  | -0.00680 | -0.01061 | -0.00031 | -0.00042 | -0.00019 |
| 7338  | 1887.84 | 124.4 | 3.51 | 0.25  | 0.0169 | 0.0443 | 15.24 | 1.185 | -4.295 | 3.1369 | 0.00403  | -0.01949 | -0.03387 | 0.00128  | -0.00621 | -0.01080 | 0.00004  | 0.00017  | -0.00038 |
| 7339  | 1887.55 | 124.4 | 3.50 | 0.26  | 0.0186 | 0.0406 | 15.36 | 1.185 | -4.179 | 3.1362 | 0.00432  | -0.01985 | -0.03205 | 0.00138  | -0.00633 | -0.01022 | 0.00014  | 0.00006  | 0.00020  |
| 7340  | 1887.84 | 124.3 | 3.51 | 0.26  | 0.0169 | 0.0405 | 15.49 | 1.185 | -4.052 | 3.1368 | 0.00448  | -0.02102 | -0.03372 | 0.00143  | -0.00670 | -0.01075 | 0.00019  | -0.00031 | -0.00033 |
| 7341  | 1887.55 | 124.4 | 3.50 | 0.26  | 0.0183 | 0.0339 | 15.61 | 1.185 | -3.933 | 3.1368 | 0.00485  | -0.02038 | -0.03289 | 0.00155  | -0.00650 | -0.01049 | 0.00031  | -0.00011 | -0.00007 |
| 7342  | 1887.70 | 124.4 | 3.50 | 0.26  | 0.0186 | 0.0340 | 15.74 | 1.185 | -3.805 | 3.1373 | 0.00323  | -0.02068 | -0.03342 | 0.00103  | -0.00659 | -0.01065 | -0.00021 | -0.00021 | -0.00023 |
| 7343  | 1887.26 | 124.3 | 3.50 | 0.25  | 0.0152 | 0.0378 | 15.86 | 1.185 | -3.670 | 3.1355 | 0.00493  | -0.01985 | -0.03155 | 0.00157  | -0.00633 | -0.01006 | 0.00033  | 0.00006  | 0.00036  |
| 7344  | 1888.13 | 124.2 | 3.51 | 0.24  | 0.0159 | 0.0362 | 15.99 | 1.184 | -3.537 | 3.1371 | 0.00420  | -0.01993 | -0.03200 | 0.00134  | -0.00635 | -0.01020 | 0.00010  | 0.00003  | 0.00022  |
| 7345  | 1887.55 | 124.1 | 3.51 | 0.25  | 0.0183 | 0.0311 | 16.11 | 1.185 | -3.422 | 3.1371 | 0.00428  | -0.01995 | -0.03459 | 0.00136  | -0.00636 | -0.01103 | 0.00012  | 0.00003  | -0.00061 |
| 7346  | 1887.41 | 124.0 | 3.51 | 0.23  | 0.0142 | 0.0363 | 16.24 | 1.184 | -3.281 | 3.1374 | 0.00303  | -0.01982 | -0.03369 | 0.00097  | -0.00632 | -0.01074 | -0.00028 | 0.00007  | -0.00032 |
| 7347  | 1887.84 | 124.1 | 3.51 | 0.23  | 0.0145 | 0.0346 | 16.36 | 1.184 | -3.156 | 3.1376 | 0.00413  | -0.01942 | -0.03447 | 0.00132  | -0.00619 | -0.01099 | 0.00007  | 0.00020  | -0.00057 |
| 7348  | 1888.13 | 124.1 | 3.51 | 0.25  | 0.0149 | 0.0375 | 16.49 | 1.185 | -3.043 | 3.1384 | 0.00437  | -0.01863 | -0.03439 | 0.00139  | -0.00594 | -0.01096 | 0.00015  | 0.00045  | -0.00054 |
| 7349  | 1887.41 | 124.2 | 3.51 | 0.24  | 0.0149 | 0.0376 | 16.61 | 1.184 | -2.914 | 3.1368 | 0.00392  | -0.01539 | -0.03382 | 0.00125  | -0.00491 | -0.01078 | 0.00001  | 0.00148  | -0.00036 |
| 7350  | 1887.84 | 124.3 | 3.51 | 0.23  | 0.0135 | 0.0424 | 16.74 | 1.184 | -2.780 | 3.1364 | 0.00527  | -0.01489 | -0.03168 | 0.00168  | -0.00475 | -0.01010 | 0.00044  | 0.00164  | 0.00032  |
| 7351  | 1887.70 | 124.1 | 3.51 | 0.24  | 0.0162 | 0.0374 | 16.86 | 1.184 | -2.663 | 3.1365 | 0.00836  | -0.01662 | -0.03246 | 0.00267  | -0.00530 | -0.01035 | 0.00143  | 0.00109  | 0.00007  |
| 7352  | 1887.26 | 124.0 | 3.51 | 0.24  | 0.0166 | 0.0422 | 16.99 | 1.184 | -2.539 | 3.1362 | 0.00944  | -0.01846 | -0.03344 | 0.00301  | -0.00589 | -0.01066 | 0.00177  | 0.00050  | -0.00024 |
| 7353  | 1887.26 | 124.0 | 3.51 | 0.24  | 0.0169 | 0.0396 | 17.11 | 1.185 | -2.418 | 3.1363 | 0.00574  | -0.02259 | -0.03251 | 0.00183  | -0.00720 | -0.01037 | 0.00059  | -0.00082 | 0.00005  |
| 7354  | 1887.70 | 123.9 | 3.51 | 0.25  | 0.0162 | 0.0402 | 17.24 | 1.185 | -2.301 | 3.1371 | 0.00385  | -0.02098 | -0.03318 | 0.00123  | -0.00669 | -0.01058 | -0.00001 | -0.00030 | -0.00016 |
| 7355  | 1888.27 | 123.9 | 3.51 | 0.24  | 0.0142 | 0.0446 | 17.36 | 1.184 | -2.163 | 3.1383 | 0.00164  | -0.01972 | -0.03319 | 0.00052  | -0.00628 | -0.01058 | -0.00072 | 0.00010  | -0.00016 |
| 7356  | 1887.98 | 124.0 | 3.51 | 0.24  | 0.0159 | 0.0418 | 17.49 | 1.184 | -2.039 | 3.1388 | 0.00084  | -0.01896 | -0.03378 | 0.00027  | -0.00604 | -0.01076 | -0.00097 | 0.00035  | -0.00034 |
| 7357  | 1888.13 | 124.0 | 3.51 | 0.24  | 0.0207 | 0.0324 | 17.61 | 1.185 | -1.925 | 3.1384 | 0.00289  | -0.01449 | -0.03394 | 0.00092  | -0.00462 | -0.01081 | -0.00032 | 0.00177  | -0.00039 |
| 7358  | 1887.98 | 123.9 | 3.51 | 0.24  | 0.0162 | 0.0383 | 17.74 | 1.184 | -1.787 | 3.1371 | 0.00689  | -0.00819 | -0.03366 | 0.00220  | -0.00261 | -0.01073 | 0.00095  | 0.00378  | -0.00031 |
| 7359  | 1888.42 | 123.9 | 3.51 | 0.26  | 0.0155 | 0.0407 | 17.86 | 1.185 | -1.679 | 3.1381 | 0.01003  | -0.01059 | -0.03516 | 0.00320  | -0.00337 | -0.01120 | 0.00196  | 0.00301  | -0.00078 |
| 7360  | 1888.42 | 124.0 | 3.51 | 0.25  | 0.0217 | 0.0348 | 17.99 | 1.185 | -1.554 | 3.1385 | 0.01360  | -0.01150 | -0.03244 | 0.00433  | -0.00367 | -0.01034 | 0.00309  | 0.00272  | 0.00008  |
| 7361  | 1887.98 | 124.2 | 3.51 | 0.25  | 0.0200 | 0.0320 | 18.11 | 1.185 | -1.423 | 3.1380 | 0.01338  | -0.01801 | -0.02892 | 0.00426  | -0.00574 | -0.00922 | 0.00302  | 0.00065  | 0.00120  |
| 7362  | 1888.13 | 124.1 | 3.51 | 0.26  | 0.0221 | 0.0313 | 18.24 | 1.185 | -1.308 | 3.1378 | 0.01275  | -0.02161 | -0.02866 | 0.00406  | -0.00689 | -0.00913 | 0.00282  | -0.00050 | 0.00129  |
| 7363  | 1888.42 | 124.0 | 3.51 | 0.24  | 0.0204 | 0.0312 | 18.36 | 1.185 | -1.167 | 3.1385 | 0.00720  | -0.02494 | -0.03194 | 0.00229  | -0.00795 | -0.01018 | 0.00105  | -0.00156 | 0.00024  |
| 7364  | 1887.98 | 124.1 | 3.51 | 0.25  | 0.0204 | 0.0313 | 18.49 | 1.185 | -1.054 | 3.1380 | 0.00220  | -0.02331 | -0.03477 | 0.00070  | -0.00743 | -0.01108 | -0.00054 | -0.00104 | -0.00066 |
| 7365  | 1888.56 | 124.1 | 3.51 | 0.25  | 0.0231 | 0.0318 | 18.61 | 1.185 | -0.929 | 3.1386 | 0.00059  | -0.01846 | -0.03530 | 0.00019  | -0.00588 | -0.01125 | -0.00105 | 0.00050  | -0.00083 |
| 7366  | 1887.70 | 124.3 | 3.51 | 0.25  | 0.0214 | 0.0309 | 18.74 | 1.185 | -0.803 | 3.1375 | -0.00025 | -0.01045 | -0.03513 | -0.00008 | -0.00333 | -0.01120 | -0.00132 | 0.00305  | -0.00078 |
| 7367  | 1888.13 | 124.2 | 3.51 | 0.24  | 0.0217 | 0.0311 | 18.86 | 1.185 | -0.673 | 3.1393 | -0.00021 | -0.00679 | -0.03600 | -0.00007 | -0.00216 | -0.01147 | -0.00131 | 0.00422  | -0.00105 |
| 7368  | 1887.84 | 124.4 | 3.50 | 0.25  | 0.0248 | 0.0272 | 18.99 | 1.185 | -0.555 | 3.1383 | 0.01089  | -0.00661 | -0.03204 | 0.00347  | -0.00211 | -0.01021 | 0.00223  | 0.00428  | 0.00021  |
| 7369  | 1887.70 | 124.4 | 3.50 | 0.24  | 0.0231 | 0.0337 | 19.11 | 1.185 | -0.425 | 3.1376 | 0.01714  | -0.00736 | -0.03099 | 0.00546  | -0.00235 | -0.00988 | 0.00422  | 0.00404  | 0.00054  |
| 7370  | 1887.84 | 124.3 | 3.51 | 0.25  | 0.0241 | 0.0305 | 19.24 | 1.185 | -0.306 | 3.1384 | 0.01597  | -0.01276 | -0.02527 | 0.00509  | -0.00406 | -0.00805 | 0.00385  | 0.00232  | 0.00237  |
| 7371  | 1887.70 | 124.4 | 3.50 | 0.26  | 0.0228 | 0.0335 | 19.36 | 1.186 | -0.185 | 3.1373 | 0.01431  | -0.01752 | -0.02598 | 0.00456  | -0.00558 | -0.00828 | 0.00332  | 0.00080  | 0.00214  |
| 7372  | 1887.70 | 124.4 | 3.50 | 0.25  | 0.0224 | 0.0324 | 19.49 | 1.185 | -0.049 | 3.1367 | 0.01010  | -0.02299 | -0.02682 | 0.00322  | -0.00733 | -0.00855 | 0.00198  | -0.00094 | 0.00187  |
| 7373  | 1888.27 | 124.3 | 3.51 | 0.26  | 0.0259 | 0.0277 | 19.61 | 1.186 | 0.064  | 3.1388 | 0.00778  | -0.02435 | -0.03125 | 0.00248  | -0.00776 | -0.00995 | 0.00124  | -0.00137 | 0.00046  |
| 7374  | 1888.13 | 124.2 | 3.51 | 0.25  | 0.0248 | 0.0318 | 19.74 | 1.185 | 0.194  | 3.1375 | 0.00260  | -0.02029 | -0.03381 | 0.00083  | -0.00647 | -0.01077 | -0.00041 | -0.00008 | -0.00036 |
| 7375  | 1887.98 | 124.3 | 3.51 | 0.25  | 0.0231 | 0.0337 | 19.86 | 1.185 | 0.322  | 3.1372 | -0.00139 | -0.01113 | -0.03662 | -0.00044 | -0.00355 | -0.01167 | -0.00168 | 0.00284  | -0.00125 |
| 7376  | 1887.98 | 124.3 | 3.51 | 0.26  | 0.0259 | 0.0296 | 19.99 | 1.186 | 0.436  | 3.1378 | 0.00210  | -0.00482 | -0.03645 | 0.00067  | -0.00154 | -0.01162 | -0.00057 | 0.00485  | -0.00120 |
| 7377  | 1888.42 | 124.3 | 3.51 | 0.25  | 0.0231 | 0.0300 | 20.11 | 1.185 | 0.574  | 3.1380 | 0.01214  | -0.00276 | -0.03181 | 0.00387  | -0.00088 | -0.01014 | 0.00263  | 0.00551  | 0.00028  |
| 7378  | 1888.13 | 124.3 | 3.51 | 0.25  | 0.0245 | 0.0307 | 20.24 | 1.185 | 0.695  | 3.1384 | 0.01624  | -0.00538 | -0.02435 | 0.00517  | -0.00171 | -0.00776 | 0.00393  | 0.00467  | 0.00266  |
| 7379  | 1888.13 | 124.3 | 3.51 | 0.25  | 0.0241 | 0.0296 | 20.36 | 1.185 | 0.822  | 3.1374 | 0.01861  | -0.00711 | -0.02262 | 0.00593  | -0.00227 | -0.00721 | 0.00469  | 0.00412  | 0.00321  |
| 7380  | 1887.98 | 124.5 | 3.50 | 0.26  | 0.0255 | 0.0257 | 20.49 | 1.186 | 0.936  | 3.1373 | 0.01753  |          |          |          |          |          |          |          |          |

Table A3. Continued.

Run = 133

M = 1.60

xsppos = 39.848

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c  |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|---------|
| 7400  | 1887.84 | 123.9 | 3.51 | 0.28  | 0.0235 | 0.0320 | 22.99 | 1.187 | 3.423  | 3.1382 | 0.01645  | -0.00617 | -0.02159 | 0.00524  | -0.00197 | -0.00688 | 0.00400  | 0.00442  | 0.00354 |
| 7401  | 1888.27 | 123.9 | 3.51 | 0.25  | 0.0234 | 0.0329 | 23.11 | 1.185 | 3.566  | 3.1376 | 0.01490  | -0.00479 | -0.02210 | 0.00475  | -0.00153 | -0.00704 | 0.00351  | 0.00486  | 0.00338 |
| 7402  | 1887.84 | 124.2 | 3.51 | 0.25  | 0.0241 | 0.0315 | 23.24 | 1.185 | 3.692  | 3.1378 | 0.01538  | -0.00302 | -0.02216 | 0.00490  | -0.00096 | -0.00706 | 0.00366  | 0.00542  | 0.00336 |
| 7403  | 1887.70 | 124.3 | 3.51 | 0.25  | 0.0241 | 0.0305 | 23.36 | 1.186 | 3.816  | 3.1370 | 0.01734  | -0.00297 | -0.02240 | 0.00553  | -0.00095 | -0.00714 | 0.00429  | 0.00544  | 0.00328 |
| 7404  | 1887.70 | 124.3 | 3.51 | 0.25  | 0.0221 | 0.0350 | 23.49 | 1.185 | 3.943  | 3.1377 | 0.01849  | -0.00210 | -0.02333 | 0.00589  | -0.00067 | -0.00743 | 0.00465  | 0.00572  | 0.00299 |
| 7405  | 1888.13 | 124.4 | 3.51 | 0.27  | 0.0259 | 0.0287 | 23.61 | 1.186 | 4.057  | 3.1382 | 0.01849  | -0.00232 | -0.02293 | 0.00589  | -0.00074 | -0.00731 | 0.00465  | 0.00565  | 0.00311 |
| 7406  | 1887.84 | 124.4 | 3.50 | 0.26  | 0.0221 | 0.0303 | 23.74 | 1.186 | 4.187  | 3.1377 | 0.02003  | -0.00256 | -0.02257 | 0.00638  | -0.00082 | -0.00719 | 0.00514  | 0.00557  | 0.00323 |
| 7407  | 1888.13 | 124.4 | 3.51 | 0.26  | 0.0235 | 0.0283 | 23.86 | 1.186 | 4.311  | 3.1385 | 0.01817  | -0.00410 | -0.02198 | 0.00579  | -0.00131 | -0.00700 | 0.00455  | 0.00508  | 0.00341 |
| 7408  | 1887.98 | 124.3 | 3.51 | 0.25  | 0.0197 | 0.0346 | 23.99 | 1.185 | 4.447  | 3.1376 | 0.01834  | -0.00546 | -0.02201 | 0.00584  | -0.00174 | -0.00701 | 0.00460  | 0.00465  | 0.00341 |
| 7409  | 1887.98 | 124.1 | 3.51 | 0.26  | 0.0228 | 0.0326 | 24.11 | 1.185 | 4.567  | 3.1375 | 0.01628  | -0.00527 | -0.02012 | 0.00519  | -0.00168 | -0.00641 | 0.00395  | 0.00471  | 0.00401 |
| 7410  | 1888.42 | 124.1 | 3.51 | 0.26  | 0.0200 | 0.0366 | 24.24 | 1.185 | 4.697  | 3.1396 | 0.01548  | -0.00346 | -0.02383 | 0.00493  | -0.00110 | -0.00759 | 0.00369  | 0.00528  | 0.00283 |
| 7411  | 1887.41 | 124.2 | 3.51 | 0.24  | 0.0200 | 0.0367 | 24.36 | 1.185 | 4.828  | 3.1368 | 0.01511  | -0.00152 | -0.02260 | 0.00482  | -0.00048 | -0.00721 | 0.00358  | 0.00590  | 0.00321 |
| 7412  | 1888.13 | 124.2 | 3.51 | 0.25  | 0.0200 | 0.0394 | 24.49 | 1.185 | 4.951  | 3.1382 | 0.01608  | -0.00269 | -0.02051 | 0.00512  | -0.00086 | -0.00653 | 0.00388  | 0.00724  | 0.00388 |
| 7413  | 1888.13 | 124.2 | 3.51 | 0.26  | 0.0207 | 0.0352 | 24.61 | 1.185 | 5.065  | 3.1385 | 0.02061  | 0.00364  | -0.02041 | 0.00657  | 0.00116  | -0.00650 | 0.00532  | 0.00755  | 0.00392 |
| 7414  | 1888.13 | 124.1 | 3.51 | 0.25  | 0.0197 | 0.0365 | 24.73 | 1.185 | 5.196  | 3.1376 | 0.02368  | 0.00359  | -0.01881 | 0.00755  | 0.00114  | -0.00599 | 0.00630  | 0.00753  | 0.00442 |
| 7415  | 1887.98 | 124.2 | 3.51 | 0.24  | 0.0173 | 0.0351 | 24.86 | 1.185 | 5.335  | 3.1375 | 0.02388  | 0.00018  | -0.01912 | 0.00761  | 0.00006  | -0.00609 | 0.00637  | 0.00644  | 0.00432 |
| 7416  | 1888.13 | 124.2 | 3.51 | 0.25  | 0.0210 | 0.0316 | 24.99 | 1.185 | 5.447  | 3.1374 | 0.02503  | 0.00014  | -0.01872 | 0.00798  | 0.00004  | -0.00597 | 0.00674  | 0.00643  | 0.00445 |
| 7417  | 1887.70 | 124.4 | 3.50 | 0.26  | 0.0180 | 0.0355 | 25.11 | 1.185 | 5.571  | 3.1382 | 0.02081  | -0.00011 | -0.02012 | 0.00663  | -0.00003 | -0.00641 | 0.00539  | 0.00635  | 0.00401 |
| 7418  | 1887.84 | 124.3 | 3.51 | 0.24  | 0.0204 | 0.0331 | 25.24 | 1.185 | 5.702  | 3.1380 | 0.02166  | -0.00118 | -0.02011 | 0.00690  | -0.00038 | -0.00641 | 0.00566  | 0.00601  | 0.00401 |
| 7419  | 1887.84 | 124.5 | 3.50 | 0.26  | 0.0193 | 0.0353 | 25.36 | 1.186 | 5.817  | 3.1380 | 0.02063  | -0.00148 | -0.02042 | 0.00658  | -0.00047 | -0.00651 | 0.00533  | 0.00591  | 0.00391 |
| 7420  | 1887.84 | 124.6 | 3.50 | 0.25  | 0.0186 | 0.0331 | 25.49 | 1.185 | 5.953  | 3.1366 | 0.02183  | -0.00021 | -0.02072 | 0.00696  | -0.00007 | -0.00660 | 0.00572  | 0.00632  | 0.00381 |
| 7421  | 1887.98 | 124.6 | 3.50 | 0.24  | 0.0193 | 0.0353 | 25.61 | 1.185 | 6.079  | 3.1382 | 0.01908  | -0.00275 | -0.02084 | 0.00618  | -0.00087 | -0.00664 | 0.00493  | 0.00551  | 0.00378 |
| 7422  | 1887.84 | 124.5 | 3.50 | 0.24  | 0.0180 | 0.0383 | 25.74 | 1.185 | 6.206  | 3.1377 | 0.01863  | -0.00023 | -0.01701 | 0.00594  | -0.00007 | -0.00542 | 0.00470  | 0.00631  | 0.00500 |
| 7423  | 1888.13 | 124.4 | 3.51 | 0.24  | 0.0149 | 0.0394 | 25.86 | 1.184 | 6.336  | 3.1380 | 0.01994  | 0.00198  | -0.01434 | 0.00636  | 0.00063  | -0.00457 | 0.00511  | 0.00702  | 0.00585 |
| 7424  | 1887.98 | 124.6 | 3.50 | 0.24  | 0.0197 | 0.0355 | 25.99 | 1.185 | 6.455  | 3.1384 | 0.02005  | 0.00359  | -0.01350 | 0.00639  | 0.00114  | -0.00430 | 0.00515  | 0.00753  | 0.00612 |
| 7425  | 1888.13 | 124.5 | 3.50 | 0.25  | 0.0197 | 0.0365 | 26.11 | 1.185 | 6.575  | 3.1388 | 0.02245  | 0.00494  | -0.01363 | 0.00715  | 0.00158  | -0.00434 | 0.00591  | 0.00796  | 0.00608 |
| 7426  | 1887.70 | 124.5 | 3.50 | 0.26  | 0.0176 | 0.0391 | 26.24 | 1.186 | 6.690  | 3.1382 | 0.02318  | 0.00427  | -0.01460 | 0.00739  | 0.00136  | -0.00465 | 0.00614  | 0.00775  | 0.00577 |
| 7427  | 1887.98 | 124.5 | 3.50 | 0.26  | 0.0200 | 0.0394 | 26.36 | 1.185 | 6.818  | 3.1382 | 0.02571  | 0.00547  | -0.01482 | 0.00819  | 0.00174  | -0.00472 | 0.00695  | 0.00813  | 0.00570 |
| 7428  | 1887.55 | 124.7 | 3.50 | 0.25  | 0.0179 | 0.0439 | 26.49 | 1.185 | 6.949  | 3.1378 | 0.02494  | 0.00746  | -0.01474 | 0.00795  | 0.00238  | -0.00470 | 0.00671  | 0.00876  | 0.00572 |
| 7429  | 1888.13 | 124.6 | 3.50 | 0.24  | 0.0166 | 0.0469 | 26.61 | 1.185 | 7.083  | 3.1385 | 0.02598  | 0.00694  | -0.01618 | 0.00828  | 0.00221  | -0.00515 | 0.00704  | 0.00860  | 0.00527 |
| 7430  | 1887.41 | 124.7 | 3.50 | 0.25  | 0.0162 | 0.0504 | 26.73 | 1.185 | 7.205  | 3.1367 | 0.02645  | 0.00766  | -0.01582 | 0.00843  | 0.00244  | -0.00504 | 0.00719  | 0.00883  | 0.00538 |
| 7431  | 1887.84 | 124.6 | 3.50 | 0.25  | 0.0221 | 0.0415 | 26.86 | 1.185 | 7.319  | 3.1385 | 0.02843  | 0.00806  | -0.01848 | 0.00906  | 0.00257  | -0.00589 | 0.00782  | 0.00895  | 0.00453 |
| 7432  | 1887.84 | 124.7 | 3.50 | 0.26  | 0.0207 | 0.0398 | 26.99 | 1.185 | 7.446  | 3.1378 | 0.02739  | 0.00955  | -0.01791 | 0.00873  | 0.00304  | -0.00571 | 0.00749  | 0.00943  | 0.00471 |
| 7433  | 1887.70 | 124.6 | 3.50 | 0.25  | 0.0176 | 0.0456 | 27.11 | 1.185 | 7.577  | 3.1375 | 0.02598  | 0.00878  | -0.01521 | 0.00828  | 0.00280  | -0.00485 | 0.00704  | 0.00918  | 0.00557 |
| 7434  | 1887.55 | 124.6 | 3.50 | 0.24  | 0.0166 | 0.0450 | 27.24 | 1.185 | 7.708  | 3.1382 | 0.02572  | 0.00777  | -0.01715 | 0.00820  | 0.00248  | -0.00546 | 0.00695  | 0.00886  | 0.00495 |
| 7435  | 1887.84 | 124.6 | 3.50 | 0.25  | 0.0214 | 0.0411 | 27.36 | 1.185 | 7.820  | 3.1381 | 0.02786  | 0.01077  | -0.01436 | 0.00888  | 0.00343  | -0.00458 | 0.00764  | 0.00982  | 0.00584 |
| 7436  | 1887.84 | 124.7 | 3.50 | 0.25  | 0.0190 | 0.0445 | 27.49 | 1.185 | 7.948  | 3.1381 | 0.02791  | 0.00461  | -0.01045 | 0.00889  | 0.00147  | -0.00333 | 0.00765  | 0.00786  | 0.00709 |
| 7437  | 1887.55 | 124.7 | 3.50 | 0.25  | 0.0190 | 0.0408 | 27.61 | 1.185 | 8.077  | 3.1380 | 0.02556  | 0.00087  | -0.01340 | 0.00814  | 0.00028  | -0.00427 | 0.00690  | 0.00666  | 0.00615 |
| 7438  | 1887.84 | 124.7 | 3.50 | 0.25  | 0.0224 | 0.0380 | 27.74 | 1.185 | 8.200  | 3.1378 | 0.02534  | -0.00134 | -0.01186 | 0.00807  | -0.00043 | -0.00378 | 0.00683  | 0.00596  | 0.00664 |
| 7439  | 1887.70 | 124.5 | 3.50 | 0.25  | 0.0162 | 0.0458 | 27.86 | 1.185 | 8.330  | 3.1389 | 0.01920  | -0.00754 | -0.01420 | 0.00612  | -0.00240 | -0.00452 | 0.00488  | 0.00398  | 0.00590 |
| 7440  | 1887.70 | 124.4 | 3.50 | 0.25  | 0.0190 | 0.0454 | 27.99 | 1.185 | 8.448  | 3.1390 | 0.01804  | -0.00773 | -0.01383 | 0.00575  | -0.00246 | -0.00441 | 0.00450  | 0.00392  | 0.00601 |
| 7441  | 1887.98 | 124.4 | 3.51 | 0.25  | 0.0210 | 0.0428 | 28.21 | 1.185 | 8.667  | 3.1383 | 0.01463  | -0.00855 | -0.01079 | 0.00466  | -0.00272 | -0.00344 | 0.00342  | 0.00366  | 0.00698 |
| 7442  | 1887.84 | 124.3 | 3.51 | 0.26  | 0.0210 | 0.0419 | 28.24 | 1.185 | 8.692  | 3.1386 | 0.01260  | -0.01051 | -0.01359 | 0.00401  | -0.00335 | -0.00433 | 0.00277  | 0.00304  | 0.00609 |
| 7443  | 1888.13 | 124.2 | 3.51 | 0.25  | 0.0228 | 0.0391 | 28.36 | 1.185 | 8.818  | 3.1383 | 0.01180  | -0.01205 | -0.01026 | 0.00376  | -0.00384 | -0.00327 | 0.00252  | 0.00255  | 0.00715 |
| 7444  | 1887.98 | 124.3 | 3.51 | 0.24  | 0.0179 | 0.0439 | 28.49 | 1.184 | 8.962  | 3.1386 | 0.00782  | -0.02087 | -0.01143 | 0.00249  | -0.00665 | -0.00364 | 0.00125  | -0.00026 | 0.00678 |
| 7445  | 1887.41 | 124.3 | 3.50 | 0.24  | 0.0193 | 0.0409 | 28.61 | 1.185 | 9.082  | 3.1375 | 0.00517  | -0.02471 | -0.01085 | 0.00165  | -0.00788 | -0.00346 | 0.00041  | -0.00149 | 0.00696 |
| 7446  | 1887.70 | 124.1 | 3.51 | 0.25  | 0.0214 | 0.0383 | 28.74 | 1.185 | 9.197  | 3.1371 | 0.00004  | -0.03259 | -0.01096 | 0.00001  | -0.01039 | -0.00349 | -0.00123 | -0.00400 | 0.00693 |
| 7447  | 1888.13 | 124.1 | 3.51 | 0.25  | 0.0197 | 0.0411 | 28.86 | 1.185 | 9.324  | 3.1384 | -0.00765 | -0.04218 | -0.01385 | -0.00244 | -0.01344 | -0.00441 | -0.00368 | -0.00705 | 0.00601 |
| 7448  | 1887.84 | 124.1 | 3.51 | 0.26  | 0.0207 | 0.0398 | 28.99 | 1.185 | 9.443  | 3.1375 | -0.01287 | -0.04639 | -0.01391 | -0.00410 | -0.01479 | -0.00443 | -0.00534 | -0.00840 | 0.00598 |
| 7449  | 1887.98 | 123.8 | 3.51 | 0.27  | 0.0214 | 0.0365 | 29.11 | 1.186 | 9.560  | 3.1389 | -0.01888 | -0.05042 | -0.01899 | -0.00602 | -0.01606 | -0.00605 | -0.00726 | -0.00968 | 0.00437 |
| 7450  | 1887.84 | 123.8 | 3.51 | 0.26  | 0.0231 | 0.0356 | 29.24 | 1.186 | 9.687  | 3.1392 | -0.02474 | -0.04857 | -0.02350 | -0.00788 | -0.01547 | -0.00749 | -0.00912 | -0.00909 | 0.00293 |
| 7451  | 1887.41 | 123.9 | 3.51 | 0.26  | 0.0238 | 0.0359 | 29.36 | 1.186 | 9.815  | 3.1375 | -0.02661 | -0.04472 | -0.02624 | -0.00848 | -0.01425 | -0.00836 | -0.00972 | -0.00787 | 0.00206 |
| 7452  | 1887.98 | 124.0 | 3.51 | 0.26  | 0.0214 | 0.0393 | 29.49 | 1.185 | 9.942  | 3.1386 | -0.02895 | -0.03549 | -0.02904 | -0.00923 | -0.01131 | -0.00925 | -0.01047 | -0.00492 | 0.00117 |
| 7453  | 1888.42 | 123.9 | 3.51 | 0.25  | 0.0197 | 0.0420 | 29.61 | 1.185 | 10.076 | 3.1381 | -0.02086 | -        |          |          |          |          |          |          |         |

Table A3. Concluded.

Run = 133

M = 1.60

xsppos = 39.848

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 7473  | 1887.98 | 124.0 | 3.51 | 0.27  | 0.0204 | 0.0406 | 32.11 | 1.186 | 12.560 | 3.1390 | -0.00073 | -0.02290 | -0.04292 | -0.00023 | -0.00730 | -0.01367 | -0.00147 | -0.00091 | -0.00325 |
| 7474  | 1887.70 | 123.8 | 3.51 | 0.27  | 0.0234 | 0.0395 | 32.24 | 1.186 | 12.683 | 3.1382 | -0.00027 | -0.02268 | -0.04275 | -0.00009 | -0.00723 | -0.01362 | -0.00133 | -0.00084 | -0.00320 |
| 7475  | 1887.98 | 123.8 | 3.51 | 0.26  | 0.0210 | 0.0400 | 32.36 | 1.186 | 12.812 | 3.1385 | 0.00208  | -0.02319 | -0.03938 | 0.00066  | -0.00739 | -0.01255 | -0.00058 | -0.00100 | -0.00213 |
| 7476  | 1887.84 | 123.8 | 3.51 | 0.26  | 0.0224 | 0.0380 | 32.49 | 1.186 | 12.938 | 3.1385 | 0.00360  | -0.02379 | -0.03843 | 0.00115  | -0.00758 | -0.01225 | -0.00009 | -0.00120 | -0.00183 |
| 7477  | 1887.98 | 123.9 | 3.51 | 0.27  | 0.0228 | 0.0363 | 32.61 | 1.186 | 13.060 | 3.1385 | 0.00265  | -0.02548 | -0.04010 | 0.00085  | -0.00812 | -0.01278 | -0.00040 | -0.00173 | -0.00236 |
| 7478  | 1887.84 | 123.7 | 3.51 | 0.26  | 0.0210 | 0.0363 | 32.73 | 1.186 | 13.186 | 3.1380 | 0.00204  | -0.02664 | -0.04116 | 0.00065  | -0.00849 | -0.01312 | -0.00059 | -0.00211 | -0.00270 |
| 7479  | 1887.84 | 123.8 | 3.51 | 0.27  | 0.0214 | 0.0383 | 32.86 | 1.186 | 13.309 | 3.1376 | -0.00069 | -0.02927 | -0.04068 | -0.00022 | -0.00933 | -0.01296 | -0.00146 | -0.00294 | -0.00255 |
| 7480  | 1888.27 | 123.7 | 3.51 | 0.27  | 0.0228 | 0.0335 | 32.99 | 1.186 | 13.432 | 3.1391 | -0.00403 | -0.03273 | -0.04206 | -0.00128 | -0.01043 | -0.01340 | -0.00252 | -0.00404 | -0.00298 |
| 7481  | 1887.98 | 123.8 | 3.51 | 0.26  | 0.0204 | 0.0396 | 33.11 | 1.185 | 13.567 | 3.1388 | -0.00634 | -0.03288 | -0.04320 | -0.00202 | -0.01048 | -0.01376 | -0.00326 | -0.00409 | -0.00335 |
| 7482  | 1887.41 | 124.0 | 3.51 | 0.25  | 0.0214 | 0.0393 | 33.24 | 1.185 | 13.697 | 3.1368 | -0.00471 | -0.03190 | -0.04228 | -0.00150 | -0.01017 | -0.01348 | -0.00274 | -0.00378 | -0.00306 |
| 7483  | 1887.84 | 124.0 | 3.51 | 0.25  | 0.0207 | 0.0408 | 33.36 | 1.185 | 13.820 | 3.1385 | -0.00746 | -0.02978 | -0.04193 | -0.00238 | -0.00949 | -0.01336 | -0.00362 | -0.00310 | -0.00294 |
| 7484  | 1887.55 | 123.9 | 3.51 | 0.27  | 0.0228 | 0.0372 | 33.48 | 1.186 | 13.929 | 3.1380 | -0.00867 | -0.02374 | -0.04197 | -0.00276 | -0.00756 | -0.01338 | -0.00400 | -0.00118 | -0.00296 |
| 7485  | 1887.98 | 124.2 | 3.51 | 0.26  | 0.0210 | 0.0363 | 33.61 | 1.186 | 14.063 | 3.1382 | -0.00123 | -0.01868 | -0.04072 | -0.00039 | -0.00595 | -0.01298 | -0.00163 | 0.00043  | -0.00256 |
| 7486  | 1887.55 | 123.9 | 3.51 | 0.27  | 0.0255 | 0.0322 | 33.74 | 1.186 | 14.178 | 3.1372 | -0.00013 | -0.01980 | -0.04217 | -0.00004 | -0.00631 | -0.01344 | -0.00128 | 0.00008  | -0.00302 |
| 7487  | 1887.26 | 123.9 | 3.51 | 0.26  | 0.0204 | 0.0350 | 33.86 | 1.186 | 14.317 | 3.1381 | 0.00604  | -0.02270 | -0.04041 | 0.00192  | -0.00723 | -0.01288 | 0.00068  | -0.00085 | -0.00246 |
| 7488  | 1888.27 | 124.0 | 3.51 | 0.26  | 0.0255 | 0.0285 | 33.99 | 1.186 | 14.434 | 3.1388 | 0.00499  | -0.02639 | -0.04407 | 0.00159  | -0.00841 | -0.01404 | 0.00035  | -0.00202 | -0.00362 |
| 7489  | 1887.84 | 124.1 | 3.51 | 0.26  | 0.0200 | 0.0404 | 34.11 | 1.186 | 14.565 | 3.1385 | 0.00261  | -0.02992 | -0.04185 | 0.00083  | -0.00953 | -0.01333 | -0.00041 | -0.00315 | -0.00291 |
| 7490  | 1887.84 | 124.2 | 3.51 | 0.27  | 0.0190 | 0.0407 | 34.24 | 1.186 | 14.684 | 3.1372 | -0.00212 | -0.03133 | -0.04353 | -0.00067 | -0.00999 | -0.01387 | -0.00192 | -0.00360 | -0.00346 |
| 7491  | 1887.98 | 124.2 | 3.51 | 0.27  | 0.0214 | 0.0355 | 34.36 | 1.186 | 14.811 | 3.1369 | -0.00548 | -0.02851 | -0.04558 | -0.00174 | -0.00908 | -0.01452 | -0.00099 | -0.00270 | -0.00410 |
| 7492  | 1887.84 | 124.1 | 3.51 | 0.26  | 0.0210 | 0.0391 | 34.49 | 1.186 | 14.938 | 3.1386 | -0.00782 | -0.02442 | -0.04603 | -0.00249 | -0.00778 | -0.01466 | -0.00373 | -0.00139 | -0.00425 |
| 7493  | 1888.42 | 124.0 | 3.51 | 0.26  | 0.0214 | 0.0374 | 34.61 | 1.186 | 15.061 | 3.1389 | -0.00366 | -0.01694 | -0.04492 | -0.00117 | -0.00540 | -0.01431 | -0.00241 | 0.00099  | -0.00389 |
| 7494  | 1887.70 | 124.0 | 3.51 | 0.25  | 0.0204 | 0.0378 | 34.74 | 1.185 | 15.196 | 3.1380 | 0.00483  | -0.01413 | -0.04115 | 0.00154  | -0.00450 | -0.01311 | 0.00030  | 0.00188  | -0.00269 |
| 7495  | 1887.55 | 124.0 | 3.51 | 0.26  | 0.0204 | 0.0378 | 34.86 | 1.186 | 15.313 | 3.1377 | 0.00763  | -0.01582 | -0.03734 | 0.00243  | -0.00504 | -0.01190 | 0.00119  | 0.00135  | -0.00148 |
| 7496  | 1887.98 | 124.0 | 3.51 | 0.26  | 0.0221 | 0.0350 | 34.99 | 1.186 | 15.437 | 3.1392 | 0.00887  | -0.01607 | -0.03461 | 0.00283  | -0.00512 | -0.01103 | 0.00159  | 0.00127  | -0.00061 |
| 7497  | 1888.13 | 123.9 | 3.51 | 0.27  | 0.0200 | 0.0376 | 35.11 | 1.186 | 15.557 | 3.1378 | 0.00942  | -0.01610 | -0.03493 | 0.00300  | -0.00513 | -0.01113 | 0.00176  | 0.00126  | -0.00071 |
| 7498  | 1886.98 | 124.0 | 3.51 | 0.27  | 0.0207 | 0.0361 | 35.24 | 1.186 | 15.680 | 3.1363 | 0.01030  | -0.01632 | -0.03517 | 0.00328  | -0.00520 | -0.01121 | 0.00204  | 0.00118  | -0.00079 |
| 7499  | 1888.13 | 123.9 | 3.51 | 0.27  | 0.0221 | 0.0303 | 35.36 | 1.186 | 15.808 | 3.1381 | 0.00909  | -0.01768 | -0.03932 | 0.00290  | -0.00563 | -0.01253 | 0.00166  | 0.00075  | -0.00211 |
| 7500  | 1887.98 | 123.7 | 3.51 | 0.27  | 0.0214 | 0.0374 | 35.49 | 1.186 | 15.931 | 3.1391 | 0.00664  | -0.01959 | -0.04411 | 0.00212  | -0.00624 | -0.01405 | 0.00088  | 0.00015  | -0.00363 |
| 7501  | 1887.70 | 123.7 | 3.51 | 0.27  | 0.0176 | 0.0428 | 35.61 | 1.186 | 16.064 | 3.1378 | 0.00730  | -0.01837 | -0.04464 | 0.00233  | -0.00585 | -0.01422 | 0.00108  | 0.00053  | -0.00381 |
| 7502  | 1887.84 | 123.6 | 3.51 | 0.28  | 0.0204 | 0.0350 | 35.74 | 1.187 | 16.172 | 3.1387 | 0.00569  | -0.02016 | -0.04533 | 0.00181  | -0.00642 | -0.01444 | 0.00057  | -0.00004 | -0.00402 |
| 7503  | 1887.70 | 123.7 | 3.51 | 0.29  | 0.0190 | 0.0398 | 35.86 | 1.187 | 16.296 | 3.1378 | 0.00591  | -0.01858 | -0.03777 | 0.00188  | -0.00592 | -0.01204 | 0.00064  | 0.00046  | -0.00162 |
| 7504  | 1887.84 | 123.8 | 3.51 | 0.26  | 0.0207 | 0.0361 | 35.99 | 1.185 | 16.442 | 3.1378 | 0.00536  | -0.01986 | -0.03401 | 0.00171  | -0.00633 | -0.01084 | 0.00047  | 0.00006  | -0.00042 |
| 7505  | 1888.13 | 124.0 | 3.51 | 0.26  | 0.0200 | 0.0376 | 36.11 | 1.186 | 16.565 | 3.1389 | 0.00528  | -0.01953 | -0.03132 | 0.00168  | -0.00622 | -0.00998 | 0.00044  | 0.00016  | 0.00044  |
| 7506  | 1887.70 | 123.9 | 3.51 | 0.26  | 0.0176 | 0.0391 | 36.24 | 1.185 | 16.696 | 3.1377 | 0.00526  | -0.01972 | -0.03008 | 0.00168  | -0.00628 | -0.00959 | 0.00044  | 0.00010  | 0.00083  |
| 7507  | 1887.84 | 124.0 | 3.51 | 0.28  | 0.0207 | 0.0361 | 36.36 | 1.186 | 16.803 | 3.1378 | 0.00477  | -0.01987 | -0.02975 | 0.00152  | -0.00633 | -0.00948 | 0.00028  | 0.00005  | 0.00094  |
| 7508  | 1888.13 | 124.1 | 3.51 | 0.27  | 0.0228 | 0.0344 | 36.49 | 1.186 | 16.934 | 3.1395 | 0.00456  | -0.02027 | -0.03241 | 0.00145  | -0.00646 | -0.01032 | 0.00021  | -0.00007 | 0.00009  |
| 7509  | 1887.98 | 124.2 | 3.51 | 0.25  | 0.0176 | 0.0391 | 36.61 | 1.185 | 17.075 | 3.1392 | 0.00305  | -0.02029 | -0.03197 | 0.00097  | -0.00647 | -0.01018 | -0.00027 | -0.00008 | 0.00024  |
| 7510  | 1887.41 | 124.2 | 3.51 | 0.26  | 0.0197 | 0.0383 | 36.74 | 1.185 | 17.195 | 3.1378 | 0.00578  | -0.01957 | -0.03301 | 0.00184  | -0.00624 | -0.01052 | 0.00060  | 0.00015  | -0.00010 |
| 7511  | 1887.84 | 124.1 | 3.51 | 0.26  | 0.0204 | 0.0350 | 36.86 | 1.186 | 17.317 | 3.1378 | 0.00479  | -0.01783 | -0.03501 | 0.00153  | -0.00568 | -0.01116 | 0.00029  | 0.00070  | -0.00074 |
| 7512  | 1887.98 | 124.0 | 3.51 | 0.27  | 0.0207 | 0.0352 | 36.99 | 1.186 | 17.436 | 3.1396 | 0.00392  | -0.02011 | -0.03426 | 0.00125  | -0.00641 | -0.01091 | 0.00001  | -0.00002 | -0.00049 |
| 7513  | 1887.98 | 123.9 | 3.51 | 0.27  | 0.0190 | 0.0389 | 37.11 | 1.186 | 17.564 | 3.1383 | 0.00669  | -0.01871 | -0.03511 | 0.00213  | -0.00596 | -0.01119 | 0.00089  | 0.00042  | -0.00077 |
| 7514  | 1887.98 | 123.8 | 3.51 | 0.27  | 0.0183 | 0.0404 | 37.24 | 1.186 | 17.684 | 3.1387 | 0.00452  | -0.01944 | -0.03493 | 0.00144  | -0.00619 | -0.01113 | 0.00020  | 0.00019  | -0.00071 |
| 7515  | 1887.84 | 123.8 | 3.51 | 0.28  | 0.0210 | 0.0354 | 37.36 | 1.186 | 17.801 | 3.1389 | 0.00359  | -0.01944 | -0.03550 | 0.00114  | -0.00619 | -0.01131 | -0.00010 | 0.00019  | -0.00089 |
| 7516  | 1888.27 | 123.7 | 3.51 | 0.28  | 0.0190 | 0.0417 | 37.49 | 1.186 | 17.926 | 3.1382 | 0.00503  | -0.01729 | -0.03394 | 0.00160  | -0.00551 | -0.01082 | 0.00036  | 0.00088  | -0.00040 |
| 7517  | 1888.13 | 123.8 | 3.51 | 0.26  | 0.0155 | 0.0426 | 37.61 | 1.185 | 18.071 | 3.1394 | 0.00413  | -0.01940 | -0.03389 | 0.00132  | -0.00618 | -0.01080 | 0.00008  | 0.00021  | -0.00038 |
| 7518  | 1887.98 | 123.8 | 3.51 | 0.26  | 0.0190 | 0.0389 | 37.74 | 1.186 | 18.193 | 3.1387 | 0.00521  | -0.01908 | -0.03545 | 0.00166  | -0.00608 | -0.01129 | 0.00042  | 0.00031  | -0.00087 |
| 7519  | 1888.13 | 123.9 | 3.51 | 0.27  | 0.0210 | 0.0409 | 37.86 | 1.186 | 18.309 | 3.1391 | 0.00441  | -0.01951 | -0.03416 | 0.00141  | -0.00622 | -0.01088 | 0.00016  | 0.00017  | -0.00046 |
| 7520  | 1887.98 | 123.9 | 3.51 | 0.25  | 0.0169 | 0.0415 | 37.99 | 1.185 | 18.450 | 3.1386 | 0.00493  | -0.01883 | -0.03626 | 0.00157  | -0.00600 | -0.01155 | 0.00033  | 0.00039  | -0.00113 |
| 7521  | 1887.84 | 124.0 | 3.51 | 0.26  | 0.0162 | 0.0448 | 38.11 | 1.185 | 18.570 | 3.1382 | 0.00585  | -0.01941 | -0.03296 | 0.00186  | -0.00619 | -0.01050 | 0.00062  | 0.00020  | -0.00008 |
| 7522  | 1888.42 | 124.2 | 3.51 | 0.26  | 0.0190 | 0.0370 | 38.24 | 1.185 | 18.691 | 3.1394 | 0.00553  | -0.01972 | -0.03522 | 0.00176  | -0.00628 | -0.01122 | 0.00052  | 0.00010  | -0.00080 |
| 7523  | 1888.27 | 124.3 | 3.51 | 0.26  | 0.0203 | 0.0396 | 38.36 | 1.185 | 18.816 | 3.1395 | 0.00583  | -0.01970 | -0.03531 | 0.00186  | -0.00627 | -0.01125 | 0.00062  | 0.00011  | -0.00083 |
| 7524  | 1887.98 | 124.2 | 3.51 | 0.25  | 0.0180 | 0.0402 | 38.49 | 1.185 | 18.950 | 3.1382 | 0.00491  | -0.01759 | -0.03283 | 0.00156  | -0.00561 | -0.01046 | 0.00032  | 0.00078  | -0.00004 |
| 7525  | 1888.56 | 124.2 | 3.51 | 0.25  | 0.0190 | 0.0389 | 38.61 | 1.185 | 19.072 | 3.1395 | 0.00578  | -0.01871 | -0.03454 | 0.00184  | -0.00596 | -0.01100 | 0.00060  | 0.00043  | -0.00058 |
| 7526  | 1887.84 | 124.1 | 3.51 | 0.25  | 0.0176 | 0.0409 |       |       |        |        |          |          |          |          |          |          |          |          |          |

Table A4. Run 134.

Run = 134

M = 1.60

xsppos = 39.848

| point | p0      | t0    | rnft | alpha | cnmrc   | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|---------|--------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 7534  | 1887.98 | 123.9 | 3.51 | -0.28 | -0.0040 | 0.0579 | 13.86 | 1.182 | -5.634 | 3.1395 | 0.00221  | -0.02147 | -0.03457 | 0.00071  | -0.00684 | -0.01101 | -0.00019 | -0.00004 | 0.00019  |
| 7535  | 1887.26 | 124.0 | 3.51 | -0.28 | -0.0033 | 0.0555 | 13.99 | 1.183 | -5.512 | 3.1368 | 0.00282  | -0.02085 | -0.03550 | 0.00090  | -0.00665 | -0.01132 | 0.00000  | 0.00015  | -0.00012 |
| 7536  | 1888.27 | 123.8 | 3.51 | -0.26 | -0.0026 | 0.0521 | 14.11 | 1.184 | -5.404 | 3.1388 | 0.00318  | -0.02146 | -0.03530 | 0.00101  | -0.00684 | -0.01125 | 0.00012  | -0.00004 | -0.00005 |
| 7537  | 1888.56 | 124.0 | 3.51 | -0.29 | -0.0050 | 0.0536 | 14.24 | 1.182 | -5.252 | 3.1393 | 0.00384  | -0.02059 | -0.03533 | 0.00122  | -0.00656 | -0.01125 | 0.00033  | 0.00024  | -0.00005 |
| 7538  | 1888.56 | 124.0 | 3.51 | -0.28 | -0.0050 | 0.0573 | 14.36 | 1.182 | -5.130 | 3.1398 | 0.00202  | -0.02226 | -0.03506 | 0.00064  | -0.00709 | -0.01117 | -0.00025 | -0.00030 | 0.00003  |
| 7539  | 1887.26 | 123.9 | 3.51 | -0.30 | -0.0061 | 0.0549 | 14.49 | 1.181 | -4.991 | 3.1382 | 0.00328  | -0.02117 | -0.03693 | 0.00104  | -0.00675 | -0.01177 | 0.00015  | 0.00005  | -0.00057 |
| 7540  | 1888.27 | 123.8 | 3.51 | -0.30 | -0.0047 | 0.0575 | 14.61 | 1.182 | -4.872 | 3.1381 | 0.00442  | -0.02040 | -0.03486 | 0.00141  | -0.00650 | -0.01111 | 0.00051  | 0.00029  | 0.00009  |
| 7541  | 1888.42 | 123.8 | 3.51 | -0.29 | -0.0054 | 0.0571 | 14.74 | 1.182 | -4.746 | 3.1389 | 0.00393  | -0.02043 | -0.03525 | 0.00125  | -0.00651 | -0.01123 | 0.00036  | 0.00029  | -0.00003 |
| 7542  | 1887.84 | 124.0 | 3.51 | -0.30 | -0.0057 | 0.0579 | 14.86 | 1.181 | -4.618 | 3.1387 | 0.00383  | -0.02084 | -0.03545 | 0.00122  | -0.00664 | -0.01129 | 0.00032  | 0.00015  | -0.00010 |
| 7543  | 1887.98 | 124.1 | 3.51 | -0.30 | -0.0081 | 0.0584 | 14.98 | 1.181 | -4.491 | 3.1388 | 0.00256  | -0.02021 | -0.03628 | 0.00082  | -0.00644 | -0.01156 | -0.00008 | 0.00035  | -0.00036 |
| 7544  | 1888.27 | 124.2 | 3.51 | -0.32 | -0.0126 | 0.0671 | 15.11 | 1.180 | -4.343 | 3.1394 | 0.00163  | -0.02039 | -0.03637 | 0.00052  | -0.00650 | -0.01158 | -0.00038 | 0.00030  | -0.00039 |
| 7545  | 1888.13 | 124.1 | 3.51 | -0.32 | -0.0133 | 0.0612 | 15.24 | 1.180 | -4.217 | 3.1397 | 0.00284  | -0.02243 | -0.03615 | 0.00090  | -0.00715 | -0.01151 | 0.00001  | -0.00035 | -0.00031 |
| 7546  | 1887.55 | 124.2 | 3.51 | -0.33 | -0.0133 | 0.0621 | 15.36 | 1.180 | -4.089 | 3.1383 | 0.00417  | -0.02125 | -0.03542 | 0.00133  | -0.00677 | -0.01129 | 0.00043  | 0.00002  | -0.00009 |
| 7547  | 1888.13 | 123.9 | 3.51 | -0.32 | -0.0119 | 0.0629 | 15.49 | 1.180 | -3.972 | 3.1391 | 0.00164  | -0.02055 | -0.03541 | 0.00052  | -0.00655 | -0.01128 | -0.00037 | 0.00025  | -0.00008 |
| 7548  | 1888.27 | 123.9 | 3.51 | -0.32 | -0.0116 | 0.0630 | 15.61 | 1.180 | -3.845 | 3.1394 | 0.00207  | -0.02191 | -0.03642 | 0.00066  | -0.00698 | -0.01160 | -0.00024 | -0.00019 | -0.00040 |
| 7549  | 1888.42 | 124.0 | 3.51 | -0.33 | -0.0157 | 0.0636 | 15.74 | 1.180 | -3.711 | 3.1394 | 0.00410  | -0.02109 | -0.03425 | 0.00131  | -0.00672 | -0.01091 | 0.00041  | 0.00007  | 0.00029  |
| 7550  | 1887.55 | 124.0 | 3.51 | -0.32 | -0.0160 | 0.0625 | 15.86 | 1.180 | -3.591 | 3.1391 | 0.00213  | -0.02085 | -0.03670 | 0.00068  | -0.00664 | -0.01169 | -0.00022 | 0.00015  | -0.00049 |
| 7551  | 1887.98 | 124.2 | 3.51 | -0.32 | -0.0129 | 0.0576 | 15.99 | 1.180 | -3.471 | 3.1381 | 0.00383  | -0.01987 | -0.03471 | 0.00122  | -0.00633 | -0.01106 | 0.00032  | 0.00046  | 0.00014  |
| 7552  | 1888.42 | 124.1 | 3.51 | -0.32 | -0.0177 | 0.0615 | 16.11 | 1.180 | -3.342 | 3.1389 | 0.00405  | -0.02029 | -0.03426 | 0.00129  | -0.00646 | -0.01092 | 0.00039  | 0.00033  | 0.00028  |
| 7553  | 1888.85 | 124.0 | 3.51 | -0.31 | -0.0140 | 0.0617 | 16.24 | 1.181 | -3.229 | 3.1411 | 0.00225  | -0.02227 | -0.03642 | 0.00071  | -0.00709 | -0.01159 | -0.00018 | -0.00029 | -0.00040 |
| 7554  | 1887.55 | 123.9 | 3.51 | -0.30 | -0.0150 | 0.0630 | 16.36 | 1.181 | -3.106 | 3.1374 | 0.00396  | -0.01984 | -0.03402 | 0.00126  | -0.00632 | -0.01084 | 0.00037  | 0.00047  | 0.00035  |
| 7555  | 1887.55 | 123.8 | 3.51 | -0.31 | -0.0147 | 0.0595 | 16.49 | 1.180 | -2.972 | 3.1391 | 0.00186  | -0.01990 | -0.03647 | 0.00059  | -0.00634 | -0.01162 | -0.00031 | 0.00045  | -0.00042 |
| 7556  | 1888.13 | 124.0 | 3.51 | -0.30 | -0.0140 | 0.0589 | 16.61 | 1.181 | -2.860 | 3.1390 | 0.00453  | -0.01663 | -0.03578 | 0.00144  | -0.00530 | -0.01140 | 0.00055  | 0.00150  | -0.00020 |
| 7557  | 1888.13 | 124.1 | 3.51 | -0.30 | -0.0167 | 0.0630 | 16.74 | 1.181 | -2.734 | 3.1392 | 0.00476  | -0.01651 | -0.03577 | 0.00152  | -0.00526 | -0.01139 | 0.00062  | 0.00153  | -0.00019 |
| 7558  | 1887.41 | 124.0 | 3.51 | -0.31 | -0.0164 | 0.0604 | 16.86 | 1.180 | -2.601 | 3.1384 | 0.00756  | -0.01995 | -0.03607 | 0.00241  | -0.00636 | -0.01149 | 0.00151  | 0.00044  | -0.00029 |
| 7559  | 1887.98 | 124.0 | 3.51 | -0.30 | -0.0119 | 0.0619 | 16.99 | 1.181 | -2.487 | 3.1393 | 0.00875  | -0.02422 | -0.03711 | 0.00279  | -0.00771 | -0.01182 | 0.00189  | -0.00092 | -0.00062 |
| 7560  | 1888.13 | 124.1 | 3.51 | -0.30 | -0.0157 | 0.0608 | 17.11 | 1.181 | -2.359 | 3.1388 | 0.00553  | -0.02277 | -0.03490 | 0.00176  | -0.00725 | -0.01112 | 0.00086  | -0.00046 | 0.00008  |
| 7561  | 1887.26 | 123.9 | 3.51 | -0.30 | -0.0160 | 0.0597 | 17.24 | 1.181 | -2.233 | 3.1380 | 0.00154  | -0.02127 | -0.03559 | 0.00049  | -0.00678 | -0.01134 | -0.00041 | 0.00001  | -0.00014 |
| 7562  | 1887.98 | 123.9 | 3.51 | -0.30 | -0.0129 | 0.0586 | 17.36 | 1.181 | -2.112 | 3.1381 | 0.00244  | -0.02034 | -0.03553 | 0.00078  | -0.00648 | -0.01132 | -0.00012 | 0.00031  | -0.00012 |
| 7563  | 1888.42 | 124.0 | 3.51 | -0.30 | -0.0129 | 0.0613 | 17.49 | 1.181 | -1.987 | 3.1400 | 0.00088  | -0.01989 | -0.03751 | 0.00028  | -0.00633 | -0.01195 | -0.00062 | 0.00046  | -0.00075 |
| 7564  | 1887.26 | 124.0 | 3.51 | -0.28 | -0.0102 | 0.0564 | 17.61 | 1.182 | -1.878 | 3.1381 | 0.00162  | -0.01497 | -0.03655 | 0.00052  | -0.00477 | -0.01165 | -0.00038 | 0.00202  | -0.00045 |
| 7565  | 1888.27 | 123.9 | 3.51 | -0.29 | -0.0122 | 0.0543 | 17.74 | 1.182 | -1.744 | 3.1385 | 0.00552  | -0.00995 | -0.03479 | 0.00176  | -0.00317 | -0.01108 | 0.00086  | 0.00362  | 0.00012  |
| 7566  | 1888.27 | 123.8 | 3.51 | -0.29 | -0.0105 | 0.0552 | 17.86 | 1.182 | -1.619 | 3.1392 | 0.00983  | -0.01000 | -0.03512 | 0.00313  | -0.00318 | -0.01119 | 0.00223  | 0.00361  | 0.00001  |
| 7567  | 1888.42 | 123.9 | 3.51 | -0.29 | -0.0112 | 0.0530 | 17.99 | 1.182 | -1.495 | 3.1396 | 0.01265  | -0.01572 | -0.03349 | 0.00403  | -0.00501 | -0.01067 | 0.00313  | 0.00179  | 0.00053  |
| 7568  | 1887.70 | 123.9 | 3.51 | -0.27 | -0.0105 | 0.0543 | 18.11 | 1.183 | -1.385 | 3.1385 | 0.01384  | -0.01851 | -0.03114 | 0.00441  | -0.00590 | -0.00992 | 0.00351  | 0.00090  | 0.00128  |
| 7569  | 1888.13 | 123.9 | 3.51 | -0.26 | -0.0061 | 0.0493 | 18.24 | 1.183 | -1.270 | 3.1387 | 0.01056  | -0.02299 | -0.03267 | 0.00336  | -0.00732 | -0.01041 | 0.00247  | -0.00053 | 0.00079  |
| 7570  | 1888.27 | 123.9 | 3.51 | -0.29 | -0.0098 | 0.0500 | 18.36 | 1.182 | -1.126 | 3.1390 | 0.00619  | -0.02446 | -0.03378 | 0.00197  | -0.00779 | -0.01076 | 0.00108  | -0.00100 | 0.00044  |
| 7571  | 1887.55 | 123.9 | 3.51 | -0.28 | -0.0109 | 0.0523 | 18.49 | 1.182 | -1.001 | 3.1390 | 0.00005  | -0.02430 | -0.03824 | 0.00002  | -0.00774 | -0.01218 | -0.00088 | -0.00095 | -0.00098 |
| 7572  | 1887.41 | 123.9 | 3.51 | -0.27 | -0.0064 | 0.0491 | 18.61 | 1.183 | -0.890 | 3.1384 | -0.00302 | -0.02172 | -0.03866 | -0.00096 | -0.00692 | -0.01232 | -0.00186 | -0.00013 | -0.00112 |
| 7573  | 1888.42 | 123.8 | 3.51 | -0.27 | -0.0044 | 0.0484 | 18.74 | 1.183 | -0.770 | 3.1393 | -0.00161 | -0.01568 | -0.03751 | -0.00051 | -0.00500 | -0.01195 | -0.00141 | 0.00180  | -0.00075 |
| 7574  | 1888.27 | 123.7 | 3.51 | -0.29 | -0.0071 | 0.0515 | 18.86 | 1.182 | -0.628 | 3.1394 | 0.00221  | -0.00667 | -0.03536 | 0.00070  | -0.00212 | -0.01126 | -0.00019 | 0.00467  | -0.00007 |
| 7575  | 1888.13 | 123.9 | 3.51 | -0.28 | -0.0040 | 0.0486 | 18.99 | 1.182 | -0.507 | 3.1390 | 0.00800  | -0.00591 | -0.03462 | 0.00255  | -0.00188 | -0.01103 | 0.00165  | 0.00491  | 0.00017  |
| 7576  | 1887.70 | 123.9 | 3.51 | -0.28 | -0.0061 | 0.0493 | 19.11 | 1.182 | -0.382 | 3.1384 | 0.01540  | -0.00873 | -0.03170 | 0.00491  | -0.00278 | -0.01010 | 0.00401  | 0.00401  | 0.00110  |
| 7577  | 1888.56 | 123.9 | 3.51 | -0.28 | -0.0074 | 0.0495 | 19.23 | 1.182 | -0.257 | 3.1402 | 0.01686  | -0.01433 | -0.02830 | 0.00537  | -0.00456 | -0.00901 | 0.00447  | 0.00223  | 0.00219  |
| 7578  | 1888.42 | 123.9 | 3.51 | -0.28 | -0.0064 | 0.0473 | 19.36 | 1.182 | -0.135 | 3.1381 | 0.01573  | -0.01735 | -0.02584 | 0.00501  | -0.00553 | -0.00823 | 0.00412  | 0.00127  | 0.00297  |
| 7579  | 1887.26 | 124.1 | 3.51 | -0.28 | -0.0061 | 0.0484 | 19.48 | 1.182 | -0.009 | 3.1373 | 0.00943  | -0.02310 | -0.03040 | 0.00301  | -0.00736 | -0.00969 | 0.00211  | -0.00057 | 0.00151  |
| 7580  | 1888.27 | 124.0 | 3.51 | -0.28 | -0.0047 | 0.0501 | 19.61 | 1.183 | 0.112  | 3.1395 | 0.00381  | -0.02585 | -0.03333 | 0.00121  | -0.00823 | -0.01062 | 0.00032  | -0.00144 | 0.00058  |
| 7581  | 1888.27 | 123.9 | 3.51 | -0.28 | -0.0074 | 0.0532 | 19.74 | 1.182 | 0.247  | 3.1390 | 0.00057  | -0.01960 | -0.03763 | 0.00018  | -0.00625 | -0.01199 | -0.00072 | 0.00055  | -0.00079 |
| 7582  | 1888.42 | 124.0 | 3.51 | -0.29 | -0.0074 | 0.0485 | 19.86 | 1.182 | 0.376  | 3.1396 | -0.00177 | -0.01186 | -0.03846 | -0.00056 | -0.00378 | -0.01225 | -0.00146 | 0.00302  | -0.00105 |
| 7583  | 1887.26 | 124.0 | 3.51 | -0.28 | -0.0050 | 0.0518 | 19.99 | 1.183 | 0.491  | 3.1380 | 0.00071  | -0.00799 | -0.03794 | 0.00023  | -0.00255 | -0.01209 | -0.00067 | 0.00425  | -0.00089 |
| 7584  | 1888.42 | 124.1 | 3.51 | -0.29 | -0.0074 | 0.0523 | 20.11 | 1.182 | 0.622  | 3.1398 | 0.01132  | -0.00463 | -0.03551 | 0.00360  | -0.00148 | -0.01131 | 0.00271  | 0.00532  | -0.00011 |
| 7585  | 1888.27 | 124.1 | 3.51 | -0.28 | -0.0061 | 0.0484 | 20.24 | 1.182 | 0.743  | 3.1399 | 0.01582  | -0.00621 | -0.02829 | 0.00504  | -0.00198 | -0.00901 | 0.00414  | 0.00482  | 0.00219  |
| 7586  | 1888.13 | 124.2 | 3.51 | -0.27 | -0.0033 | 0.0452 | 20.36 | 1.183 | 0.853  | 3.1393 | 0.01848  | -0.00743 | -0.02375 | 0.00589  | -0.00237 | -0.00756 | 0.00499  | 0.00443  | 0.00363  |
| 7587  | 1887.26 | 124.3 | 3.51 | -0.28 | -0.0068 | 0.0490 | 20.49 | 1.182 | 0.992  | 3.1372 | 0.01584  |          |          |          |          |          |          |          |          |



Table A4. Continued.

Run = 134

M = 1.60

xsppos = 39.848

| point | p0      | t0    | rnft | alpha | cnmrc   | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c  |
|-------|---------|-------|------|-------|---------|--------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|---------|
| 7607  | 1887.98 | 123.6 | 3.51 | -0.29 | -0.0071 | 0.0515 | 22.99 | 1.182 | 3.497  | 3.1393 | 0.01292  | -0.00760 | -0.02287 | 0.00412  | -0.00242 | -0.00729 | 0.00322  | 0.00437  | 0.00391 |
| 7608  | 1888.13 | 123.6 | 3.51 | -0.27 | -0.0047 | 0.0491 | 23.11 | 1.183 | 3.612  | 3.1393 | 0.01387  | -0.00633 | -0.02325 | 0.00442  | -0.00202 | -0.00741 | 0.00352  | 0.00478  | 0.00379 |
| 7609  | 1888.27 | 123.7 | 3.51 | -0.29 | -0.0043 | 0.0447 | 23.24 | 1.182 | 3.745  | 3.1398 | 0.01411  | -0.00792 | -0.02484 | 0.00450  | -0.00252 | -0.00791 | 0.00360  | 0.00427  | 0.00329 |
| 7610  | 1888.13 | 123.9 | 3.51 | -0.27 | -0.0023 | 0.0458 | 23.36 | 1.183 | 3.856  | 3.1388 | 0.01525  | -0.00519 | -0.02463 | 0.00486  | -0.00165 | -0.00785 | 0.00396  | 0.00514  | 0.00335 |
| 7611  | 1887.98 | 123.9 | 3.51 | -0.30 | -0.0085 | 0.0499 | 23.49 | 1.182 | 4.007  | 3.1402 | 0.01423  | -0.00465 | -0.02540 | 0.00453  | -0.00148 | -0.00809 | 0.00363  | 0.00531  | 0.00311 |
| 7612  | 1887.26 | 124.0 | 3.51 | -0.28 | -0.0050 | 0.0471 | 23.61 | 1.182 | 4.119  | 3.1384 | 0.01613  | -0.00542 | -0.02551 | 0.00514  | -0.00173 | -0.00813 | 0.00424  | 0.00507  | 0.00307 |
| 7613  | 1887.84 | 123.9 | 3.51 | -0.30 | -0.0085 | 0.0517 | 23.73 | 1.182 | 4.255  | 3.1389 | 0.01626  | -0.00548 | -0.02529 | 0.00518  | -0.00175 | -0.00806 | 0.00428  | 0.00505  | 0.00314 |
| 7614  | 1888.27 | 123.8 | 3.51 | -0.28 | -0.0054 | 0.0469 | 23.86 | 1.182 | 4.366  | 3.1384 | 0.01790  | -0.00502 | -0.02389 | 0.00570  | -0.00160 | -0.00761 | 0.00481  | 0.00519  | 0.00359 |
| 7615  | 1888.27 | 123.8 | 3.51 | -0.29 | -0.0064 | 0.0445 | 23.99 | 1.182 | 4.497  | 3.1391 | 0.01788  | -0.00712 | -0.02549 | 0.00570  | -0.00227 | -0.00812 | 0.00480  | 0.00453  | 0.00308 |
| 7616  | 1887.84 | 123.6 | 3.51 | -0.30 | -0.0071 | 0.0488 | 24.11 | 1.182 | 4.631  | 3.1388 | 0.01583  | -0.00799 | -0.02456 | 0.00504  | -0.00255 | -0.00783 | 0.00415  | 0.00425  | 0.00337 |
| 7617  | 1887.98 | 123.5 | 3.51 | -0.30 | -0.0078 | 0.0493 | 24.24 | 1.182 | 4.755  | 3.1378 | 0.01489  | -0.00743 | -0.02286 | 0.00474  | -0.00237 | -0.00729 | 0.00385  | 0.00443  | 0.00391 |
| 7618  | 1888.13 | 123.4 | 3.51 | -0.30 | -0.0071 | 0.0487 | 24.36 | 1.182 | 4.882  | 3.1386 | 0.01315  | -0.00339 | -0.02390 | 0.00419  | -0.00108 | -0.00761 | 0.00329  | 0.00572  | 0.00358 |
| 7619  | 1887.98 | 123.4 | 3.51 | -0.29 | -0.0050 | 0.0452 | 24.49 | 1.182 | 4.997  | 3.1380 | 0.01381  | -0.00180 | -0.02329 | 0.00440  | -0.00058 | -0.00742 | 0.00351  | 0.00622  | 0.00378 |
| 7620  | 1887.84 | 123.3 | 3.51 | -0.30 | -0.0074 | 0.0486 | 24.61 | 1.181 | 5.133  | 3.1396 | 0.01580  | -0.00007 | -0.02347 | 0.00503  | -0.00002 | -0.00748 | 0.00414  | 0.00677  | 0.00372 |
| 7621  | 1888.13 | 123.4 | 3.51 | -0.30 | -0.0068 | 0.0461 | 24.74 | 1.182 | 5.256  | 3.1390 | 0.01918  | 0.00068  | -0.02319 | 0.00611  | 0.00022  | -0.00739 | 0.00521  | 0.00701  | 0.00381 |
| 7622  | 1888.27 | 123.4 | 3.51 | -0.29 | -0.0061 | 0.0474 | 24.86 | 1.182 | 5.375  | 3.1386 | 0.02134  | 0.00091  | -0.02179 | 0.00680  | 0.00029  | -0.00694 | 0.00590  | 0.00709  | 0.00426 |
| 7623  | 1887.98 | 123.2 | 3.51 | -0.30 | -0.0085 | 0.0489 | 24.99 | 1.181 | 5.512  | 3.1390 | 0.02153  | -0.00150 | -0.02093 | 0.00686  | -0.00048 | -0.00667 | 0.00596  | 0.00632  | 0.00453 |
| 7624  | 1887.98 | 123.3 | 3.51 | -0.31 | -0.0085 | 0.0452 | 25.11 | 1.181 | 5.639  | 3.1385 | 0.02237  | -0.00168 | -0.02030 | 0.00713  | -0.00053 | -0.00647 | 0.00623  | 0.00626  | 0.00473 |
| 7625  | 1887.98 | 123.4 | 3.51 | -0.30 | -0.0074 | 0.0476 | 25.24 | 1.182 | 5.757  | 3.1394 | 0.02013  | -0.00049 | -0.02122 | 0.00641  | -0.00140 | -0.00676 | 0.00552  | 0.00540  | 0.00444 |
| 7626  | 1887.70 | 123.2 | 3.51 | -0.30 | -0.0061 | 0.0465 | 25.36 | 1.182 | 5.883  | 3.1388 | 0.01823  | -0.00445 | -0.02227 | 0.00581  | -0.00142 | -0.00710 | 0.00491  | 0.00538  | 0.00410 |
| 7627  | 1888.13 | 123.2 | 3.51 | -0.30 | -0.0074 | 0.0486 | 25.49 | 1.181 | 6.011  | 3.1403 | 0.01670  | -0.00547 | -0.02418 | 0.00532  | -0.00174 | -0.00770 | 0.00442  | 0.00505  | 0.00350 |
| 7628  | 1888.13 | 123.1 | 3.52 | -0.31 | -0.0102 | 0.0489 | 25.61 | 1.181 | 6.148  | 3.1388 | 0.01615  | -0.00730 | -0.02450 | 0.00514  | -0.00233 | -0.00781 | 0.00425  | 0.00447  | 0.00339 |
| 7629  | 1888.27 | 123.1 | 3.52 | -0.32 | -0.0105 | 0.0487 | 25.74 | 1.180 | 6.275  | 3.1389 | 0.01514  | -0.01015 | -0.02047 | 0.00482  | -0.00323 | -0.00652 | 0.00393  | 0.00356  | 0.00468 |
| 7630  | 1887.84 | 123.5 | 3.51 | -0.31 | -0.0095 | 0.0502 | 25.86 | 1.181 | 6.393  | 3.1383 | 0.01493  | -0.00699 | -0.01988 | 0.00476  | -0.00223 | -0.00633 | 0.00386  | 0.00457  | 0.00486 |
| 7631  | 1888.27 | 123.5 | 3.51 | -0.30 | -0.0078 | 0.0484 | 25.99 | 1.181 | 6.510  | 3.1398 | 0.01413  | -0.00545 | -0.01796 | 0.00450  | -0.00174 | -0.00572 | 0.00360  | 0.00506  | 0.00548 |
| 7632  | 1887.98 | 123.5 | 3.51 | -0.31 | -0.0095 | 0.0521 | 26.11 | 1.181 | 6.642  | 3.1382 | 0.01447  | -0.00375 | -0.01495 | 0.00461  | -0.00120 | -0.00476 | 0.00371  | 0.00560  | 0.00644 |
| 7633  | 1887.98 | 123.6 | 3.51 | -0.31 | -0.0109 | 0.0513 | 26.24 | 1.181 | 6.774  | 3.1397 | 0.01399  | -0.00465 | -0.01504 | 0.00446  | -0.00148 | -0.00479 | 0.00356  | 0.00531  | 0.00641 |
| 7634  | 1887.98 | 123.4 | 3.51 | -0.30 | -0.0095 | 0.0539 | 26.36 | 1.181 | 6.889  | 3.1398 | 0.01666  | -0.00552 | -0.01690 | 0.00530  | -0.00176 | -0.00538 | 0.00441  | 0.00504  | 0.00581 |
| 7635  | 1887.98 | 123.5 | 3.51 | -0.31 | -0.0085 | 0.0526 | 26.49 | 1.181 | 7.017  | 3.1380 | 0.01685  | -0.00347 | -0.01724 | 0.00537  | -0.00111 | -0.00549 | 0.00447  | 0.00569  | 0.00570 |
| 7636  | 1887.70 | 123.6 | 3.51 | -0.31 | -0.0098 | 0.0519 | 26.61 | 1.181 | 7.148  | 3.1385 | 0.01737  | -0.00478 | -0.01875 | 0.00553  | -0.00152 | -0.00597 | 0.00464  | 0.00527  | 0.00522 |
| 7637  | 1887.98 | 123.5 | 3.51 | -0.30 | -0.0071 | 0.0506 | 26.74 | 1.181 | 7.260  | 3.1391 | 0.01689  | -0.00472 | -0.01918 | 0.00538  | -0.00150 | -0.00611 | 0.00449  | 0.00529  | 0.00509 |
| 7638  | 1887.98 | 123.7 | 3.51 | -0.29 | -0.0088 | 0.0543 | 26.86 | 1.182 | 7.379  | 3.1395 | 0.01591  | -0.00344 | -0.02114 | 0.00507  | -0.00110 | -0.00673 | 0.00417  | 0.00570  | 0.00446 |
| 7639  | 1888.13 | 123.7 | 3.51 | -0.30 | -0.0116 | 0.0575 | 26.99 | 1.181 | 7.512  | 3.1399 | 0.01388  | -0.00551 | -0.02483 | 0.00442  | -0.00176 | -0.00791 | 0.00352  | 0.00504  | 0.00329 |
| 7640  | 1887.84 | 123.5 | 3.51 | -0.30 | -0.0105 | 0.0571 | 27.11 | 1.181 | 7.635  | 3.1378 | 0.01743  | -0.00574 | -0.02223 | 0.00555  | -0.00183 | -0.00709 | 0.00466  | 0.00496  | 0.00411 |
| 7641  | 1887.98 | 123.3 | 3.51 | -0.30 | -0.0102 | 0.0564 | 27.24 | 1.181 | 7.763  | 3.1392 | 0.01487  | -0.00678 | -0.02241 | 0.00474  | -0.00216 | -0.00714 | 0.00384  | 0.00463  | 0.00406 |
| 7642  | 1887.98 | 123.5 | 3.51 | -0.30 | -0.0081 | 0.0566 | 27.36 | 1.182 | 7.882  | 3.1396 | 0.01463  | -0.00418 | -0.02372 | 0.00466  | -0.00133 | -0.00756 | 0.00376  | 0.00546  | 0.00364 |
| 7643  | 1887.98 | 123.5 | 3.51 | -0.29 | -0.0068 | 0.0545 | 27.49 | 1.182 | 7.999  | 3.1376 | 0.01497  | -0.00277 | -0.01985 | 0.00477  | -0.00088 | -0.00633 | 0.00387  | 0.00591  | 0.00487 |
| 7644  | 1887.98 | 123.6 | 3.51 | -0.31 | -0.0102 | 0.0526 | 27.61 | 1.181 | 8.142  | 3.1392 | 0.01446  | -0.00621 | -0.02036 | 0.00461  | -0.00198 | -0.00649 | 0.00371  | 0.00482  | 0.00471 |
| 7645  | 1887.84 | 123.4 | 3.51 | -0.30 | -0.0095 | 0.0577 | 27.74 | 1.181 | 8.263  | 3.1389 | 0.01531  | -0.00792 | -0.01938 | 0.00488  | -0.00252 | -0.00617 | 0.00398  | 0.00427  | 0.00502 |
| 7646  | 1887.98 | 123.4 | 3.51 | -0.28 | -0.0044 | 0.0549 | 27.86 | 1.182 | 8.366  | 3.1383 | 0.01657  | -0.00961 | -0.01967 | 0.00528  | -0.00306 | -0.00627 | 0.00438  | 0.00373  | 0.00493 |
| 7647  | 1888.13 | 123.4 | 3.51 | -0.30 | -0.0092 | 0.0588 | 27.99 | 1.181 | 8.511  | 3.1389 | 0.01220  | -0.01513 | -0.02182 | 0.00389  | -0.00482 | -0.00695 | 0.00299  | 0.00197  | 0.00425 |
| 7648  | 1888.13 | 123.4 | 3.51 | -0.31 | -0.0099 | 0.0593 | 28.16 | 1.181 | 8.693  | 3.1389 | 0.01000  | -0.01974 | -0.02290 | 0.00319  | -0.00629 | -0.00730 | 0.00229  | 0.00050  | 0.00390 |
| 7649  | 1888.13 | 123.3 | 3.51 | -0.30 | -0.0068 | 0.0536 | 28.23 | 1.181 | 8.758  | 3.1390 | 0.00714  | -0.01968 | -0.02193 | 0.00228  | -0.00627 | -0.00699 | 0.00138  | 0.00053  | 0.00421 |
| 7650  | 1888.13 | 123.4 | 3.51 | -0.31 | -0.0071 | 0.0506 | 28.36 | 1.181 | 8.887  | 3.1388 | 0.00382  | -0.02046 | -0.01916 | 0.00122  | -0.00652 | -0.00610 | 0.00032  | 0.00028  | 0.00509 |
| 7651  | 1888.27 | 123.7 | 3.51 | -0.30 | -0.0064 | 0.0528 | 28.49 | 1.181 | 9.010  | 3.1387 | 0.00056  | -0.02289 | -0.01980 | 0.00018  | -0.00729 | -0.00631 | -0.00072 | -0.00050 | 0.00489 |
| 7652  | 1888.13 | 123.6 | 3.51 | -0.31 | -0.0064 | 0.0528 | 28.61 | 1.181 | 9.137  | 3.1392 | -0.00050 | -0.02410 | -0.02075 | -0.00016 | -0.00768 | -0.00661 | -0.00106 | -0.00088 | 0.00459 |
| 7653  | 1888.13 | 123.8 | 3.51 | -0.30 | -0.0050 | 0.0508 | 28.74 | 1.182 | 9.256  | 3.1392 | -0.00208 | -0.02913 | -0.02150 | -0.00066 | -0.00928 | -0.00685 | -0.00156 | -0.00249 | 0.00435 |
| 7654  | 1887.84 | 123.9 | 3.51 | -0.31 | -0.0088 | 0.0553 | 28.86 | 1.181 | 9.397  | 3.1386 | -0.00536 | -0.03616 | -0.02147 | -0.00171 | -0.01152 | -0.00684 | -0.00261 | -0.00473 | 0.00436 |
| 7655  | 1888.27 | 123.8 | 3.51 | -0.30 | -0.0047 | 0.0482 | 28.99 | 1.181 | 9.509  | 3.1390 | -0.00851 | -0.04255 | -0.01935 | -0.00271 | -0.01356 | -0.00616 | -0.00361 | -0.00676 | 0.00504 |
| 7656  | 1888.27 | 123.7 | 3.51 | -0.32 | -0.0078 | 0.0558 | 29.11 | 1.180 | 9.648  | 3.1389 | -0.01534 | -0.04905 | -0.02224 | -0.00489 | -0.01563 | -0.00708 | -0.00578 | -0.00883 | 0.00411 |
| 7657  | 1887.98 | 123.8 | 3.51 | -0.32 | -0.0074 | 0.0523 | 29.24 | 1.180 | 9.774  | 3.1392 | -0.02194 | -0.05174 | -0.02466 | -0.00699 | -0.01648 | -0.00786 | -0.00789 | -0.00969 | 0.00334 |
| 7658  | 1888.27 | 123.8 | 3.51 | -0.31 | -0.0071 | 0.0543 | 29.36 | 1.181 | 9.892  | 3.1385 | -0.02452 | -0.05040 | -0.02849 | -0.00781 | -0.01606 | -0.00908 | -0.00871 | -0.00927 | 0.00212 |
| 7659  | 1887.84 | 123.8 | 3.51 | -0.31 | -0.0074 | 0.0532 | 29.49 | 1.181 | 10.020 | 3.1387 | -0.02803 | -0.04334 | -0.03322 | -0.00893 | -0.01381 | -0.01058 | -0.00983 | -0.00701 | 0.00062 |
| 7660  | 1888.42 | 123.7 | 3.51 | -0.31 | -0.0074 | 0.0532 | 29.61 | 1.181 | 10.138 | 3.1400 | -0.03040 |          |          |          |          |          |          |          |         |

Table A4. Concluded.

Run = 134

M = 1.60

xsppos = 39.848

| point | p0      | t0    | rnft | alpha | cnmrc   | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|---------|--------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 7680  | 1887.98 | 123.9 | 3.51 | -0.30 | -0.0064 | 0.0519 | 32.11 | 1.182 | 12.631 | 3.1395 | 0.00447  | -0.01831 | -0.04869 | 0.00142  | -0.00583 | -0.01551 | 0.00053  | 0.00096  | -0.00431 |
| 7681  | 1887.70 | 123.8 | 3.51 | -0.30 | -0.0085 | 0.0554 | 32.24 | 1.181 | 12.761 | 3.1382 | 0.00374  | -0.01776 | -0.04207 | 0.00119  | -0.00566 | -0.01341 | 0.00030  | 0.00113  | -0.00221 |
| 7682  | 1888.13 | 123.6 | 3.51 | -0.30 | -0.0074 | 0.0551 | 32.36 | 1.181 | 12.886 | 3.1386 | 0.00395  | -0.01896 | -0.03678 | 0.00126  | -0.00604 | -0.01172 | 0.00036  | 0.00075  | -0.00052 |
| 7683  | 1888.13 | 123.6 | 3.51 | -0.29 | -0.0040 | 0.0486 | 32.49 | 1.182 | 12.998 | 3.1390 | 0.00366  | -0.02086 | -0.03455 | 0.00117  | -0.00665 | -0.01101 | 0.00027  | 0.00015  | 0.00019  |
| 7684  | 1887.84 | 123.8 | 3.51 | -0.28 | -0.0040 | 0.0523 | 32.61 | 1.182 | 13.119 | 3.1389 | 0.00540  | -0.02221 | -0.03693 | 0.00172  | -0.00708 | -0.01177 | 0.00082  | -0.00028 | -0.00057 |
| 7685  | 1887.98 | 123.6 | 3.51 | -0.29 | -0.0071 | 0.0525 | 32.74 | 1.182 | 13.253 | 3.1392 | 0.00498  | -0.02488 | -0.03872 | 0.00159  | -0.00793 | -0.01234 | 0.00069  | -0.00113 | -0.00114 |
| 7686  | 1887.55 | 123.8 | 3.51 | -0.29 | -0.0061 | 0.0493 | 32.86 | 1.182 | 13.375 | 3.1374 | 0.00448  | -0.02494 | -0.03768 | 0.00143  | -0.00795 | -0.01201 | 0.00053  | -0.00116 | -0.00081 |
| 7687  | 1887.70 | 123.7 | 3.51 | -0.30 | -0.0064 | 0.0482 | 32.99 | 1.182 | 13.504 | 3.1369 | 0.00252  | -0.02614 | -0.03890 | 0.00080  | -0.00833 | -0.01240 | -0.00009 | -0.00154 | -0.00120 |
| 7688  | 1888.13 | 123.7 | 3.51 | -0.29 | -0.0068 | 0.0527 | 33.11 | 1.182 | 13.624 | 3.1397 | -0.00295 | -0.03160 | -0.04100 | -0.00094 | -0.01007 | -0.01306 | -0.00184 | -0.00327 | -0.00186 |
| 7689  | 1887.98 | 123.7 | 3.51 | -0.28 | -0.0071 | 0.0543 | 33.24 | 1.182 | 13.744 | 3.1386 | -0.00310 | -0.03025 | -0.04126 | -0.00099 | -0.00964 | -0.01315 | -0.00188 | -0.00284 | -0.00195 |
| 7690  | 1888.13 | 123.8 | 3.51 | -0.29 | -0.0050 | 0.0489 | 33.36 | 1.182 | 13.869 | 3.1386 | -0.00509 | -0.03090 | -0.04010 | -0.00162 | -0.00984 | -0.01278 | -0.00252 | -0.00305 | -0.00158 |
| 7691  | 1887.84 | 123.9 | 3.51 | -0.30 | -0.0078 | 0.0540 | 33.49 | 1.182 | 14.005 | 3.1389 | -0.00705 | -0.02992 | -0.03917 | -0.00224 | -0.00953 | -0.01248 | -0.00314 | -0.00274 | -0.00128 |
| 7692  | 1887.98 | 123.6 | 3.51 | -0.30 | -0.0075 | 0.0560 | 33.61 | 1.181 | 14.135 | 3.1389 | -0.00667 | -0.02361 | -0.03887 | -0.00212 | -0.00752 | -0.01239 | -0.00302 | -0.00073 | -0.00119 |
| 7693  | 1887.84 | 124.0 | 3.51 | -0.28 | -0.0054 | 0.0506 | 33.73 | 1.182 | 14.242 | 3.1382 | -0.00463 | -0.02004 | -0.03798 | -0.00147 | -0.00639 | -0.01210 | -0.00237 | 0.00041  | -0.00091 |
| 7694  | 1887.41 | 123.8 | 3.51 | -0.30 | -0.0078 | 0.0521 | 33.86 | 1.181 | 14.384 | 3.1386 | 0.00155  | -0.01818 | -0.03872 | 0.00049  | -0.00579 | -0.01234 | -0.00040 | 0.00100  | -0.00114 |
| 7695  | 1887.41 | 123.8 | 3.51 | -0.30 | -0.0092 | 0.0514 | 33.99 | 1.182 | 14.507 | 3.1375 | 0.00700  | -0.02077 | -0.03784 | 0.00223  | -0.00662 | -0.01206 | 0.00133  | 0.00018  | -0.00086 |
| 7696  | 1887.70 | 123.6 | 3.51 | -0.29 | -0.0057 | 0.0523 | 34.11 | 1.182 | 14.623 | 3.1378 | 0.00803  | -0.02299 | -0.03864 | 0.00256  | -0.00733 | -0.01231 | 0.00166  | -0.00053 | -0.00111 |
| 7697  | 1887.84 | 123.5 | 3.51 | -0.29 | -0.0071 | 0.0525 | 34.23 | 1.182 | 14.747 | 3.1377 | 0.00495  | -0.02683 | -0.03973 | 0.00158  | -0.00855 | -0.01266 | 0.00068  | -0.00176 | -0.00146 |
| 7698  | 1887.98 | 123.6 | 3.51 | -0.29 | -0.0068 | 0.0527 | 34.36 | 1.182 | 14.875 | 3.1378 | 0.00211  | -0.02935 | -0.04199 | 0.00067  | -0.00935 | -0.01338 | -0.00023 | -0.00256 | -0.00218 |
| 7699  | 1887.70 | 123.8 | 3.51 | -0.28 | -0.0054 | 0.0506 | 34.49 | 1.182 | 14.993 | 3.1381 | -0.00195 | -0.02976 | -0.04265 | -0.00062 | -0.00948 | -0.01359 | -0.00152 | -0.00269 | -0.00239 |
| 7700  | 1887.41 | 123.6 | 3.51 | -0.29 | -0.0068 | 0.0517 | 34.61 | 1.182 | 15.127 | 3.1374 | -0.00541 | -0.02636 | -0.04313 | -0.00173 | -0.00840 | -0.01375 | -0.00262 | -0.00161 | -0.00255 |
| 7701  | 1887.26 | 123.7 | 3.51 | -0.29 | -0.0050 | 0.0471 | 34.74 | 1.182 | 15.245 | 3.1381 | -0.00787 | -0.01999 | -0.04563 | -0.00251 | -0.00637 | -0.01454 | -0.00340 | 0.00042  | -0.00334 |
| 7702  | 1887.55 | 123.6 | 3.51 | -0.29 | -0.0071 | 0.0516 | 34.86 | 1.182 | 15.375 | 3.1374 | -0.00152 | -0.01542 | -0.04413 | -0.00049 | -0.00492 | -0.01406 | -0.00138 | 0.00188  | -0.00287 |
| 7703  | 1887.84 | 123.7 | 3.51 | -0.29 | -0.0081 | 0.0510 | 34.99 | 1.182 | 15.504 | 3.1382 | 0.00619  | -0.01229 | -0.03584 | 0.00197  | -0.00392 | -0.01142 | 0.00107  | 0.00288  | -0.00022 |
| 7704  | 1887.55 | 123.7 | 3.51 | -0.29 | -0.0054 | 0.0469 | 35.11 | 1.182 | 15.623 | 3.1373 | 0.00938  | -0.01423 | -0.03213 | 0.00299  | -0.00453 | -0.01024 | 0.00209  | 0.00226  | 0.00096  |
| 7705  | 1887.98 | 123.6 | 3.51 | -0.29 | -0.0071 | 0.0515 | 35.24 | 1.182 | 15.755 | 3.1385 | 0.00944  | -0.01481 | -0.03131 | 0.00301  | -0.00472 | -0.00998 | 0.00211  | 0.00207  | 0.00122  |
| 7706  | 1887.98 | 123.9 | 3.51 | -0.29 | -0.0061 | 0.0512 | 35.36 | 1.182 | 15.878 | 3.1388 | 0.00960  | -0.01604 | -0.03413 | 0.00306  | -0.00511 | -0.01087 | 0.00216  | 0.00168  | 0.00033  |
| 7707  | 1887.41 | 123.9 | 3.51 | -0.30 | -0.0050 | 0.0480 | 35.49 | 1.182 | 16.002 | 3.1385 | 0.00887  | -0.01641 | -0.03594 | 0.00283  | -0.00523 | -0.01145 | 0.00193  | 0.00157  | -0.00025 |
| 7708  | 1887.70 | 123.8 | 3.51 | -0.29 | -0.0074 | 0.0514 | 35.61 | 1.182 | 16.129 | 3.1371 | 0.00902  | -0.01672 | -0.03875 | 0.00288  | -0.00533 | -0.01235 | 0.00198  | 0.00146  | -0.00115 |
| 7709  | 1887.55 | 123.8 | 3.51 | -0.29 | -0.0074 | 0.0514 | 35.74 | 1.182 | 16.249 | 3.1384 | 0.00773  | -0.01933 | -0.04430 | 0.00246  | -0.00616 | -0.01412 | 0.00157  | 0.00064  | -0.00292 |
| 7710  | 1887.98 | 123.8 | 3.51 | -0.30 | -0.0068 | 0.0508 | 35.86 | 1.182 | 16.380 | 3.1386 | 0.00676  | -0.01864 | -0.04547 | 0.00215  | -0.00594 | -0.01449 | 0.00126  | 0.00085  | -0.00329 |
| 7711  | 1887.70 | 123.8 | 3.51 | -0.30 | -0.0085 | 0.0508 | 35.99 | 1.182 | 16.510 | 3.1390 | 0.00546  | -0.02077 | -0.03900 | 0.00174  | -0.00662 | -0.01243 | 0.00084  | 0.00018  | -0.00123 |
| 7712  | 1887.70 | 123.8 | 3.51 | -0.30 | -0.0098 | 0.0482 | 36.11 | 1.181 | 16.634 | 3.1377 | 0.00537  | -0.01819 | -0.03420 | 0.00171  | -0.00580 | -0.01090 | 0.00081  | 0.00100  | 0.00030  |
| 7713  | 1887.98 | 123.7 | 3.51 | -0.29 | -0.0071 | 0.0497 | 36.24 | 1.182 | 16.749 | 3.1372 | 0.00673  | -0.01841 | -0.03107 | 0.00215  | -0.00587 | -0.00990 | 0.00125  | 0.00093  | 0.00130  |
| 7714  | 1887.98 | 123.7 | 3.51 | -0.30 | -0.0074 | 0.0495 | 36.36 | 1.182 | 16.882 | 3.1392 | 0.00554  | -0.01918 | -0.02861 | 0.00177  | -0.00611 | -0.00911 | 0.00087  | 0.00069  | 0.00209  |
| 7715  | 1887.84 | 123.7 | 3.51 | -0.30 | -0.0074 | 0.0495 | 36.49 | 1.181 | 17.008 | 3.1381 | 0.00533  | -0.01862 | -0.03070 | 0.00170  | -0.00593 | -0.00978 | 0.00080  | 0.00086  | 0.00141  |
| 7716  | 1887.84 | 123.5 | 3.51 | -0.29 | -0.0057 | 0.0495 | 36.61 | 1.182 | 17.120 | 3.1374 | 0.00655  | -0.01848 | -0.02977 | 0.00209  | -0.00589 | -0.00949 | 0.00119  | 0.00091  | 0.00171  |
| 7717  | 1887.98 | 123.5 | 3.51 | -0.30 | -0.0092 | 0.0495 | 36.74 | 1.181 | 17.263 | 3.1393 | 0.00587  | -0.01914 | -0.03155 | 0.00187  | -0.00610 | -0.01005 | 0.00097  | 0.00070  | 0.00115  |
| 7718  | 1888.27 | 123.8 | 3.51 | -0.28 | -0.0047 | 0.0473 | 36.86 | 1.183 | 17.362 | 3.1391 | 0.00524  | -0.01801 | -0.03166 | 0.00167  | -0.00574 | -0.01009 | 0.00077  | 0.00106  | 0.00111  |
| 7719  | 1888.13 | 123.8 | 3.51 | -0.29 | -0.0078 | 0.0512 | 36.99 | 1.182 | 17.504 | 3.1386 | 0.00481  | -0.01850 | -0.03145 | 0.00153  | -0.00589 | -0.01002 | 0.00064  | 0.00090  | 0.00118  |
| 7720  | 1888.13 | 123.8 | 3.51 | -0.29 | -0.0095 | 0.0549 | 37.11 | 1.182 | 17.630 | 3.1397 | 0.00443  | -0.01981 | -0.03296 | 0.00141  | -0.00631 | -0.01050 | 0.00051  | 0.00048  | 0.00070  |
| 7721  | 1887.84 | 123.8 | 3.51 | -0.30 | -0.0092 | 0.0523 | 37.24 | 1.181 | 17.764 | 3.1396 | 0.00281  | -0.01981 | -0.03360 | 0.00090  | -0.00631 | -0.01070 | 0.00000  | 0.00048  | 0.00050  |
| 7722  | 1888.13 | 123.7 | 3.51 | -0.30 | -0.0105 | 0.0543 | 37.36 | 1.181 | 17.889 | 3.1387 | 0.00501  | -0.01836 | -0.03384 | 0.00160  | -0.00585 | -0.01078 | 0.00070  | 0.00094  | 0.00042  |
| 7723  | 1887.98 | 123.8 | 3.51 | -0.29 | -0.0064 | 0.0528 | 37.49 | 1.182 | 18.002 | 3.1383 | 0.00377  | -0.01956 | -0.03264 | 0.00120  | -0.00623 | -0.01040 | 0.00030  | 0.00056  | 0.00080  |
| 7724  | 1887.41 | 123.8 | 3.51 | -0.31 | -0.0112 | 0.0530 | 37.61 | 1.181 | 18.142 | 3.1372 | 0.00427  | -0.01858 | -0.03267 | 0.00136  | -0.00592 | -0.01041 | 0.00046  | 0.00087  | 0.00078  |
| 7725  | 1888.56 | 123.6 | 3.51 | -0.31 | -0.0092 | 0.0550 | 37.74 | 1.181 | 18.264 | 3.1400 | 0.00406  | -0.01938 | -0.03477 | 0.00129  | -0.00617 | -0.01107 | 0.00039  | 0.00062  | 0.00012  |
| 7726  | 1888.13 | 123.5 | 3.51 | -0.30 | -0.0068 | 0.0517 | 37.86 | 1.182 | 18.378 | 3.1381 | 0.00552  | -0.01913 | -0.03295 | 0.00176  | -0.00610 | -0.01050 | 0.00086  | 0.00070  | 0.00070  |
| 7727  | 1888.27 | 123.6 | 3.51 | -0.30 | -0.0078 | 0.0502 | 37.99 | 1.181 | 18.508 | 3.1405 | 0.00164  | -0.02088 | -0.03273 | 0.00052  | -0.00665 | -0.01042 | -0.00037 | 0.00014  | 0.00078  |
| 7728  | 1887.98 | 123.6 | 3.51 | -0.31 | -0.0092 | 0.0532 | 38.11 | 1.181 | 18.641 | 3.1391 | 0.00463  | -0.01995 | -0.03290 | 0.00148  | -0.00635 | -0.01048 | 0.00058  | 0.00044  | 0.00072  |
| 7729  | 1887.55 | 123.8 | 3.51 | -0.30 | -0.0088 | 0.0525 | 38.24 | 1.181 | 18.764 | 3.1378 | 0.00490  | -0.01827 | -0.03216 | 0.00156  | -0.00582 | -0.01025 | 0.00066  | 0.00097  | 0.00095  |
| 7730  | 1887.98 | 123.7 | 3.51 | -0.31 | -0.0095 | 0.0558 | 38.36 | 1.181 | 18.892 | 3.1390 | 0.00412  | -0.01978 | -0.03318 | 0.00131  | -0.00630 | -0.01057 | 0.00041  | 0.00049  | 0.00063  |
| 7731  | 1888.27 | 123.8 | 3.51 | -0.31 | -0.0088 | 0.0543 | 38.49 | 1.181 | 19.015 | 3.1407 | 0.00221  | -0.02059 | -0.03493 | 0.00070  | -0.00655 | -0.01112 | -0.00019 | 0.00024  | 0.00008  |
| 7732  | 1887.84 | 123.8 | 3.51 | -0.30 | -0.0085 | 0.0536 | 38.61 | 1.181 | 19.135 | 3.1400 | 0.00318  | -0.02058 | -0.03390 | 0.00101  | -0.00655 | -0.01080 | 0.00012  | 0.00024  | 0.00040  |
| 7733  | 1888.13 | 123.8 | 3.51 | -0.30 | -0.0074 | 0.0551 |       |       |        |        |          |          |          |          |          |          |          |          |          |

Table A5. Run 135.

Run = 135

M = 1.60

xsp05 = 39.848

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc   | x     | h/L   | xhbeta | pref   | dp01      | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|---------|-------|-------|--------|--------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 7734  | 1887.12 | 123.8 | 3.51 | 0.68  | 0.0424 | 0.0154  | 13.86 | 1.191 | -5.776 | 3.1383 | 0.00199   | -0.02129 | -0.03514 | 0.00063  | -0.00679 | -0.01120 | -0.00026 | -0.00009 | 0.00019  |
| 7735  | 1887.70 | 123.9 | 3.51 | 0.69  | 0.0485 | 0.0076  | 13.99 | 1.192 | -5.666 | 3.1387 | 0.00315   | -0.02030 | -0.03613 | 0.00100  | -0.00647 | -0.01151 | 0.00011  | 0.00023  | -0.00013 |
| 7736  | 1887.84 | 124.1 | 3.51 | 0.69  | 0.0468 | 0.0076  | 14.11 | 1.192 | -5.536 | 3.1383 | 0.00292   | -0.02069 | -0.03697 | 0.00093  | -0.00659 | -0.01178 | 0.00003  | 0.00010  | -0.00040 |
| 7737  | 1887.70 | 123.9 | 3.51 | 0.69  | 0.0437 | 0.0124  | 14.24 | 1.192 | -5.409 | 3.1381 | 0.00316   | -0.02068 | -0.03433 | 0.00101  | -0.00659 | -0.01094 | 0.00011  | 0.00010  | 0.00044  |
| 7738  | 1887.55 | 123.9 | 3.51 | 0.68  | 0.0424 | 0.0079  | 14.36 | 1.191 | -5.273 | 3.1389 | 0.00284   | -0.02209 | -0.03605 | 0.00090  | -0.00704 | -0.01148 | 0.00001  | -0.00034 | -0.00010 |
| 7739  | 1887.84 | 123.8 | 3.51 | 0.68  | 0.0430 | 0.0111  | 14.49 | 1.191 | -5.153 | 3.1385 | 0.00304   | -0.01976 | -0.03575 | 0.00097  | -0.00630 | -0.01139 | 0.00007  | 0.00040  | -0.00001 |
| 7740  | 1887.70 | 123.7 | 3.51 | 0.68  | 0.0454 | 0.0105  | 14.61 | 1.191 | -5.028 | 3.1388 | 0.00225   | -0.02066 | -0.03669 | 0.00072  | -0.00658 | -0.01169 | -0.00018 | 0.00011  | -0.00031 |
| 7741  | 1888.42 | 123.8 | 3.51 | 0.68  | 0.0440 | 0.0126  | 14.74 | 1.191 | -4.900 | 3.1397 | 0.00170   | -0.02117 | -0.03565 | 0.00054  | -0.00674 | -0.01135 | -0.00035 | -0.00005 | 0.00003  |
| 7742  | 1887.98 | 123.7 | 3.51 | 0.68  | 0.0417 | 0.0131  | 14.86 | 1.191 | -4.777 | 3.1401 | 0.00255   | -0.02209 | -0.03702 | 0.00081  | -0.00704 | -0.01179 | -0.00008 | -0.00034 | -0.00041 |
| 7743  | 1887.55 | 123.7 | 3.51 | 0.69  | 0.0417 | 0.0122  | 14.99 | 1.191 | -4.653 | 3.1375 | 0.00451   | -0.02037 | -0.03602 | 0.00144  | -0.00649 | -0.01148 | 0.00054  | 0.00020  | -0.00010 |
| 7744  | 1888.27 | 123.9 | 3.51 | 0.67  | 0.0413 | 0.0092  | 15.11 | 1.190 | -4.511 | 3.1393 | 0.00313   | -0.01962 | -0.03615 | 0.00100  | -0.00625 | -0.01152 | 0.00010  | 0.00045  | -0.00013 |
| 7745  | 1887.98 | 123.8 | 3.51 | 0.69  | 0.0410 | 0.0099  | 15.24 | 1.191 | -4.401 | 3.1390 | 0.00240   | -0.02203 | -0.03497 | 0.00076  | -0.00702 | -0.01114 | -0.00013 | -0.00032 | 0.00024  |
| 7746  | 1888.13 | 123.7 | 3.51 | 0.67  | 0.0393 | 0.0081  | 15.36 | 1.190 | -4.263 | 3.1393 | 0.00320   | -0.02111 | -0.03526 | 0.00102  | -0.00672 | -0.01123 | 0.00012  | -0.00003 | 0.00015  |
| 7747  | 1888.13 | 123.5 | 3.51 | 0.67  | 0.0386 | 0.0030  | 15.49 | 1.190 | -4.138 | 3.1387 | 0.00292   | -0.01998 | -0.03411 | 0.00093  | -0.00636 | -0.01087 | 0.00004  | 0.00033  | 0.00051  |
| 7748  | 1887.98 | 123.8 | 3.51 | 0.67  | 0.0365 | 0.0075  | 15.61 | 1.190 | -4.006 | 3.1392 | 0.00299   | -0.02142 | -0.03608 | 0.00095  | -0.00682 | -0.01149 | 0.00006  | -0.00013 | -0.00011 |
| 7749  | 1888.13 | 123.8 | 3.51 | 0.66  | 0.0375 | 0.0053  | 15.74 | 1.190 | -3.878 | 3.1399 | 0.00271   | -0.02133 | -0.03620 | 0.00086  | -0.00679 | -0.01153 | -0.00003 | -0.00010 | -0.00015 |
| 7750  | 1887.84 | 123.8 | 3.51 | 0.65  | 0.0365 | 0.0047  | 15.86 | 1.189 | -3.749 | 3.1386 | 0.00346   | -0.02084 | -0.03540 | 0.00110  | -0.00664 | -0.01128 | 0.00021  | 0.00005  | 0.00010  |
| 7751  | 1887.98 | 123.8 | 3.51 | 0.66  | 0.0386 | 0.0012  | 15.99 | 1.190 | -3.625 | 3.1391 | 0.00228   | -0.02129 | -0.03620 | 0.00073  | -0.00678 | -0.01153 | -0.00017 | -0.00009 | -0.00015 |
| 7752  | 1887.70 | 123.9 | 3.51 | 0.65  | 0.0365 | 0.0056  | 16.11 | 1.189 | -3.492 | 3.1389 | 0.00220   | -0.02202 | -0.03628 | 0.00070  | -0.00701 | -0.01156 | -0.00020 | -0.00032 | -0.00018 |
| 7753  | 1887.98 | 123.8 | 3.51 | 0.66  | 0.0369 | 0.0049  | 16.24 | 1.189 | -3.374 | 3.1384 | 0.00266   | -0.02004 | -0.03477 | 0.00085  | -0.00639 | -0.01108 | -0.00005 | 0.00031  | 0.00030  |
| 7754  | 1887.55 | 123.9 | 3.51 | 0.65  | 0.0352 | 0.0077  | 16.36 | 1.189 | -3.245 | 3.1381 | 0.00358   | -0.02150 | -0.03584 | 0.00114  | -0.00685 | -0.01142 | 0.00025  | -0.00016 | -0.00004 |
| 7755  | 1888.27 | 123.8 | 3.51 | 0.65  | 0.0362 | 0.0073  | 16.49 | 1.189 | -3.123 | 3.1378 | 0.00413   | -0.01899 | -0.03410 | 0.00132  | -0.00605 | -0.01087 | 0.00042  | 0.00064  | 0.00051  |
| 7756  | 1888.56 | 124.0 | 3.51 | 0.65  | 0.0358 | 0.0090  | 16.61 | 1.189 | -2.996 | 3.1401 | 0.00084   | -0.01819 | -0.03736 | 0.00027  | -0.00579 | -0.01190 | -0.00063 | 0.00090  | -0.00052 |
| 7757  | 1888.13 | 124.1 | 3.51 | 0.66  | 0.0369 | 0.0077  | 16.74 | 1.190 | -2.878 | 3.1395 | 0.00335   | -0.01560 | -0.03759 | 0.00107  | -0.00497 | -0.01197 | 0.00017  | 0.00173  | -0.00059 |
| 7758  | 1887.84 | 124.1 | 3.51 | 0.66  | 0.0382 | 0.0047  | 16.86 | 1.190 | -2.753 | 3.1387 | 0.00540   | -0.01720 | -0.03590 | 0.00172  | -0.00548 | -0.01144 | 0.00082  | 0.00121  | -0.00005 |
| 7759  | 1888.27 | 124.0 | 3.51 | 0.66  | 0.0344 | 0.0157  | 16.98 | 1.189 | -2.625 | 3.1392 | 0.00816   | -0.02246 | -0.03423 | 0.00260  | -0.00715 | -0.01090 | 0.00170  | -0.00046 | 0.00048  |
| 7760  | 1888.13 | 123.8 | 3.51 | 0.65  | 0.0355 | 0.0163  | 17.11 | 1.189 | -2.497 | 3.1395 | 0.00729   | -0.02325 | -0.03596 | 0.00232  | -0.00741 | -0.01145 | 0.00143  | -0.00071 | -0.00007 |
| 7761  | 1888.27 | 123.8 | 3.51 | 0.66  | 0.0393 | 0.0090  | 17.24 | 1.190 | -2.378 | 3.1388 | 0.00452   | -0.02199 | -0.03400 | 0.00144  | -0.00700 | -0.01083 | 0.00054  | -0.00031 | 0.00055  |
| 7762  | 1887.70 | 123.8 | 3.51 | 0.65  | 0.0351 | 0.0179  | 17.36 | 1.189 | -2.246 | 3.1383 | 0.00218   | -0.02184 | -0.03538 | 0.00070  | -0.00696 | -0.01127 | -0.00020 | -0.00026 | 0.00011  |
| 7763  | 1887.84 | 123.8 | 3.51 | 0.65  | 0.0369 | 0.0123  | 17.49 | 1.189 | -2.123 | 3.1384 | 0.00181   | -0.01986 | -0.03519 | 0.00058  | -0.00633 | -0.01121 | -0.00032 | 0.00037  | 0.00017  |
| 7764  | 1887.84 | 123.9 | 3.51 | 0.66  | 0.0389 | 0.0088  | 17.61 | 1.190 | -2.002 | 3.1377 | 0.00057   | -0.01564 | -0.03461 | 0.00018  | -0.00498 | -0.01103 | -0.00071 | 0.00171  | -0.00035 |
| 7765  | 1887.98 | 123.9 | 3.51 | 0.66  | 0.0417 | 0.0057  | 17.74 | 1.190 | -1.881 | 3.1390 | 0.00377   | -0.01231 | -0.03591 | 0.00120  | -0.00392 | -0.01144 | 0.00031  | 0.00277  | -0.00006 |
| 7766  | 1888.42 | 123.8 | 3.51 | 0.65  | 0.0393 | 0.0071  | 17.86 | 1.190 | -1.751 | 3.1406 | 0.00571   | -0.01084 | -0.03825 | 0.00182  | -0.00345 | -0.01218 | 0.00092  | 0.00324  | -0.00080 |
| 7767  | 1888.13 | 124.1 | 3.51 | 0.66  | 0.0420 | 0.0031  | 17.99 | 1.190 | -1.630 | 3.1390 | 0.01087   | -0.01101 | -0.03640 | 0.00346  | -0.00351 | -0.01160 | 0.00257  | 0.00319  | -0.00022 |
| 7768  | 1887.98 | 124.1 | 3.51 | 0.65  | 0.0430 | -0.0010 | 18.11 | 1.190 | -1.504 | 3.1394 | 0.01400   | -0.01697 | -0.03212 | 0.00446  | -0.00540 | -0.01023 | 0.00356  | 0.00129  | 0.00115  |
| 7769  | 1888.13 | 123.9 | 3.51 | 0.67  | 0.0396 | 0.0055  | 18.24 | 1.190 | -1.386 | 3.1387 | 0.00986   | -0.02206 | -0.03066 | 0.00314  | -0.00703 | -0.00977 | 0.00225  | -0.00033 | 0.00161  |
| 7770  | 1887.84 | 124.1 | 3.51 | 0.66  | 0.0417 | 0.0038  | 18.36 | 1.190 | -1.259 | 3.1385 | 0.00638   | -0.02361 | -0.03345 | 0.00203  | -0.00752 | -0.01066 | 0.00114  | -0.00083 | 0.00072  |
| 7771  | 1887.55 | 124.1 | 3.51 | 0.67  | 0.0400 | 0.0057  | 18.49 | 1.190 | -1.134 | 3.1393 | -0.00012  | -0.02723 | -0.03501 | -0.00004 | -0.00867 | -0.01115 | -0.00093 | -0.00198 | 0.00023  |
| 7772  | 1887.84 | 124.1 | 3.51 | 0.66  | 0.0396 | 0.0036  | 18.61 | 1.190 | -1.001 | 3.1383 | 0.00001   | -0.01869 | -0.03694 | 0.00000  | -0.00595 | -0.01177 | -0.00089 | 0.00074  | -0.00039 |
| 7773  | 1888.13 | 124.3 | 3.51 | 0.66  | 0.0444 | -0.0003 | 18.74 | 1.190 | -0.885 | 3.1387 | -0.00078  | -0.01415 | -0.03749 | -0.00025 | -0.00451 | -0.01194 | -0.00114 | 0.00219  | -0.00056 |
| 7774  | 1887.98 | 124.0 | 3.51 | 0.66  | 0.0420 | 0.0021  | 18.86 | 1.190 | -0.759 | 3.1393 | 0.00168   | -0.00794 | -0.03595 | 0.00054  | -0.00253 | -0.01145 | -0.00036 | 0.00417  | -0.00007 |
| 7775  | 1888.27 | 123.9 | 3.51 | 0.67  | 0.0420 | 0.0049  | 18.99 | 1.190 | -0.637 | 3.1391 | 0.01064   | -0.00643 | -0.03350 | 0.00339  | -0.00205 | -0.01067 | 0.00249  | 0.00465  | 0.00071  |
| 7776  | 1888.27 | 123.9 | 3.51 | 0.66  | 0.0413 | 0.0036  | 19.11 | 1.190 | -0.506 | 3.1390 | 0.01573   | -0.00913 | -0.03065 | 0.00501  | -0.00291 | -0.00977 | 0.00412  | 0.00379  | 0.00162  |
| 7777  | 1887.70 | 124.0 | 3.51 | 0.66  | 0.0472 | -0.0016 | 19.24 | 1.190 | -0.383 | 3.1389 | 0.01617   | -0.01205 | -0.02751 | 0.00515  | -0.00384 | -0.00877 | 0.00426  | 0.00285  | 0.00262  |
| 7778  | 1887.84 | 123.8 | 3.51 | 0.67  | 0.0444 | 0.0025  | 19.36 | 1.190 | -0.264 | 3.1381 | 0.01508   | -0.01692 | -0.02702 | 0.00481  | -0.00539 | -0.00861 | 0.00391  | 0.00130  | 0.00277  |
| 7779  | 1888.27 | 123.8 | 3.51 | 0.67  | 0.0441 | 0.0051  | 19.49 | 1.190 | -0.135 | 3.1390 | 0.01073   | -0.02010 | -0.03007 | 0.00342  | -0.00640 | -0.00958 | 0.00252  | 0.00029  | 0.00180  |
| 7780  | 1888.27 | 123.9 | 3.51 | 0.66  | 0.0478 | -0.0003 | 19.61 | 1.190 | -0.012 | 3.1393 | 0.00646   | -0.02479 | -0.03341 | 0.00206  | -0.00790 | -0.01064 | 0.00116  | -0.00120 | 0.00074  |
| 7781  | 1887.55 | 123.8 | 3.51 | 0.67  | 0.0427 | 0.0072  | 19.74 | 1.190 | 0.113  | 3.1388 | -0.00091  | -0.02071 | -0.03755 | -0.00029 | -0.00660 | -0.01196 | -0.00119 | 0.00010  | -0.00058 |
| 7782  | 1887.84 | 123.9 | 3.51 | 0.66  | 0.0458 | 0.0005  | 19.87 | 1.190 | 0.243  | 3.1390 | 0.00185   | -0.01355 | -0.03967 | -0.00059 | -0.00432 | -0.01264 | -0.00149 | 0.00238  | 0.00126  |
| 7783  | 1887.55 | 124.2 | 3.51 | 0.66  | 0.0458 | 0.0033  | 19.99 | 1.190 | 0.362  | 3.1389 | 0.00044   | -0.00514 | -0.03990 | 0.00014  | -0.00164 | -0.01271 | -0.00075 | 0.00506  | -0.00133 |
| 7784  | 1887.55 | 124.1 | 3.51 | 0.66  | 0.0430 | 0.0102  | 20.11 | 1.190 | 0.491  | 3.1386 | 0.00659   | -0.00477 | -0.03645 | 0.00210  | -0.00152 | -0.01161 | 0.00120  | 0.00517  | -0.00023 |
| 7785  | 1888.27 | 123.9 | 3.51 | 0.67  | 0.0430 | 0.0083  | 20.24 | 1.190 | 0.613  | 3.1398 | 0.01607   | -0.00582 | -0.02954 | 0.00512  | -0.00185 | -0.00941 | 0.00422  | 0.00484  | 0.00197  |
| 7786  | 1888.13 | 123.9 | 3.51 | 0.67  | 0.0482 | -0.0010 | 20.36 | 1.191 | 0.730  | 3.1393 | 0.01831   | -0.00817 | -0.02781 | 0.00583  | -0.00260 | -0.00886 | 0.00494  | 0.00409  | 0.00252  |
| 7787  | 1887.98 | 123.8 | 3.51 | 0.66  | 0.0441 | 0.0023  | 20.49 | 1.190 | 0.862  | 3.1390 | 0.01605</ |          |          |          |          |          |          |          |          |

Table A5. Continued.

Run = 135

M = 1.60

xsppos = 39.848

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc   | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c  |
|-------|---------|-------|------|-------|--------|---------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|---------|
| 7807  | 1887.98 | 124.2 | 3.51 | 0.66  | 0.0485 | 0.0010  | 22.99 | 1.190 | 3.367  | 3.1393 | 0.01387  | -0.00675 | -0.02186 | 0.00442  | -0.00215 | -0.00696 | 0.00352  | 0.00455  | 0.00442 |
| 7808  | 1887.70 | 124.0 | 3.51 | 0.66  | 0.0444 | -0.0003 | 23.11 | 1.190 | 3.491  | 3.1386 | 0.01526  | -0.00536 | -0.02319 | 0.00486  | -0.00171 | -0.00739 | 0.00397  | 0.00499  | 0.00399 |
| 7809  | 1887.70 | 123.9 | 3.51 | 0.66  | 0.0448 | -0.0001 | 23.24 | 1.190 | 3.619  | 3.1380 | 0.01695  | -0.00279 | -0.02183 | 0.00540  | -0.00089 | -0.00696 | 0.00451  | 0.00581  | 0.00443 |
| 7810  | 1887.98 | 123.9 | 3.51 | 0.65  | 0.0441 | 0.0023  | 23.36 | 1.190 | 3.746  | 3.1384 | 0.01693  | -0.00327 | -0.02280 | 0.00539  | -0.00104 | -0.00727 | 0.00450  | 0.00565  | 0.00412 |
| 7811  | 1888.27 | 124.0 | 3.51 | 0.65  | 0.0437 | 0.0003  | 23.49 | 1.190 | 3.873  | 3.1401 | 0.01663  | -0.00281 | -0.02536 | 0.00529  | -0.00089 | -0.00808 | 0.00440  | 0.00580  | 0.00331 |
| 7812  | 1888.42 | 123.9 | 3.51 | 0.66  | 0.0444 | -0.0003 | 23.61 | 1.190 | 3.992  | 3.1396 | 0.01788  | -0.00338 | -0.02392 | 0.00569  | -0.00108 | -0.00762 | 0.00480  | 0.00562  | 0.00376 |
| 7813  | 1888.42 | 124.2 | 3.51 | 0.66  | 0.0465 | -0.0010 | 23.74 | 1.190 | 4.116  | 3.1391 | 0.01898  | -0.00295 | -0.02458 | 0.00605  | -0.00094 | -0.00783 | 0.00515  | 0.00575  | 0.00355 |
| 7814  | 1887.98 | 124.2 | 3.51 | 0.65  | 0.0441 | 0.0014  | 23.86 | 1.190 | 4.249  | 3.1392 | 0.01831  | -0.00637 | -0.02439 | 0.00583  | -0.00203 | -0.00777 | 0.00494  | 0.00467  | 0.00361 |
| 7815  | 1888.27 | 124.1 | 3.51 | 0.66  | 0.0461 | 0.0007  | 23.99 | 1.190 | 4.367  | 3.1391 | 0.01822  | -0.00656 | -0.02539 | 0.00581  | -0.00209 | -0.00809 | 0.00491  | 0.00461  | 0.00329 |
| 7816  | 1888.13 | 124.1 | 3.51 | 0.65  | 0.0427 | 0.0034  | 24.11 | 1.190 | 4.498  | 3.1397 | 0.01594  | -0.00793 | -0.02399 | 0.00508  | -0.00253 | -0.00764 | 0.00418  | 0.00417  | 0.00374 |
| 7817  | 1887.70 | 124.1 | 3.51 | 0.65  | 0.0434 | 0.0057  | 24.24 | 1.190 | 4.621  | 3.1388 | 0.01459  | -0.00448 | -0.02520 | 0.00465  | -0.00143 | -0.00803 | 0.00375  | 0.00527  | 0.00335 |
| 7818  | 1887.41 | 124.1 | 3.51 | 0.65  | 0.0403 | 0.0049  | 24.36 | 1.189 | 4.752  | 3.1382 | 0.01609  | -0.00013 | -0.02328 | 0.00513  | -0.00004 | -0.00742 | 0.00423  | 0.00665  | 0.00396 |
| 7819  | 1887.84 | 124.0 | 3.51 | 0.65  | 0.0410 | 0.0053  | 24.49 | 1.190 | 4.875  | 3.1384 | 0.01801  | 0.00251  | -0.02322 | 0.00574  | 0.00080  | -0.00740 | 0.00484  | 0.00750  | 0.00398 |
| 7820  | 1887.84 | 123.9 | 3.51 | 0.65  | 0.0406 | 0.0079  | 24.61 | 1.189 | 5.003  | 3.1385 | 0.02117  | 0.00308  | -0.02083 | 0.00675  | 0.00098  | -0.00664 | 0.00585  | 0.00768  | 0.00474 |
| 7821  | 1887.84 | 123.8 | 3.51 | 0.65  | 0.0417 | 0.0010  | 24.74 | 1.189 | 5.128  | 3.1392 | 0.02294  | 0.00186  | -0.02009 | 0.00731  | 0.00059  | -0.00640 | 0.00641  | 0.00729  | 0.00498 |
| 7822  | 1887.98 | 123.7 | 3.51 | 0.66  | 0.0430 | -0.0029 | 24.86 | 1.190 | 5.244  | 3.1395 | 0.02446  | 0.00103  | -0.02226 | 0.00779  | 0.00033  | -0.00709 | 0.00690  | 0.00702  | 0.00429 |
| 7823  | 1887.70 | 123.8 | 3.51 | 0.65  | 0.0413 | 0.0017  | 24.99 | 1.189 | 5.377  | 3.1385 | 0.02289  | -0.00025 | -0.02030 | 0.00729  | -0.00008 | -0.00647 | 0.00640  | 0.00662  | 0.00491 |
| 7824  | 1887.98 | 123.9 | 3.51 | 0.65  | 0.0424 | -0.0005 | 25.11 | 1.190 | 5.498  | 3.1390 | 0.02154  | 0.00068  | -0.01945 | 0.00686  | 0.00022  | -0.00620 | 0.00597  | 0.00691  | 0.00518 |
| 7825  | 1887.98 | 123.9 | 3.51 | 0.65  | 0.0406 | 0.0023  | 25.24 | 1.190 | 5.623  | 3.1387 | 0.01974  | 0.00157  | -0.02141 | 0.00629  | 0.00050  | -0.00682 | 0.00539  | 0.00720  | 0.00456 |
| 7826  | 1887.41 | 124.1 | 3.51 | 0.66  | 0.0413 | 0.0008  | 25.36 | 1.190 | 5.747  | 3.1372 | 0.02040  | 0.00044  | -0.02133 | 0.00650  | 0.00014  | -0.00680 | 0.00561  | 0.00684  | 0.00458 |
| 7827  | 1887.70 | 124.2 | 3.51 | 0.66  | 0.0437 | -0.0025 | 25.49 | 1.190 | 5.868  | 3.1381 | 0.02143  | -0.00004 | -0.02230 | 0.00683  | -0.00001 | -0.00711 | 0.00594  | 0.00668  | 0.00428 |
| 7828  | 1887.41 | 124.3 | 3.50 | 0.65  | 0.0417 | 0.0001  | 25.61 | 1.190 | 6.000  | 3.1373 | 0.02156  | 0.00254  | -0.02234 | 0.00687  | 0.00081  | -0.00712 | 0.00598  | 0.00750  | 0.00426 |
| 7829  | 1887.84 | 124.1 | 3.51 | 0.65  | 0.0369 | 0.0086  | 25.74 | 1.189 | 6.131  | 3.1382 | 0.02185  | 0.00613  | -0.01804 | 0.00696  | 0.00195  | -0.00575 | 0.00607  | 0.00865  | 0.00563 |
| 7830  | 1887.98 | 124.0 | 3.51 | 0.65  | 0.0393 | 0.0043  | 25.86 | 1.189 | 6.256  | 3.1386 | 0.02357  | 0.00798  | -0.01527 | 0.00751  | 0.00254  | -0.00487 | 0.00662  | 0.00924  | 0.00652 |
| 7831  | 1887.70 | 124.0 | 3.51 | 0.65  | 0.0396 | 0.0036  | 25.99 | 1.189 | 6.382  | 3.1383 | 0.02682  | 0.01011  | -0.01146 | 0.00855  | 0.00322  | -0.00365 | 0.00765  | 0.00992  | 0.00773 |
| 7832  | 1887.70 | 124.1 | 3.51 | 0.65  | 0.0396 | 0.0064  | 26.11 | 1.189 | 6.502  | 3.1376 | 0.02809  | 0.01035  | -0.01531 | 0.00895  | 0.00330  | -0.00488 | 0.00806  | 0.00999  | 0.00650 |
| 7833  | 1887.84 | 124.2 | 3.51 | 0.65  | 0.0427 | 0.0025  | 26.24 | 1.190 | 6.624  | 3.1394 | 0.02806  | 0.01033  | -0.01591 | 0.00894  | 0.00329  | -0.00507 | 0.00804  | 0.00999  | 0.00632 |
| 7834  | 1887.70 | 124.0 | 3.51 | 0.65  | 0.0382 | 0.0066  | 26.36 | 1.189 | 6.755  | 3.1383 | 0.02924  | 0.01181  | -0.01546 | 0.00932  | 0.00376  | -0.00493 | 0.00842  | 0.01046  | 0.00646 |
| 7835  | 1887.55 | 124.1 | 3.51 | 0.65  | 0.0427 | 0.0044  | 26.49 | 1.190 | 6.873  | 3.1367 | 0.03098  | 0.01743  | -0.01221 | 0.00988  | 0.00556  | -0.00389 | 0.00898  | 0.01225  | 0.00749 |
| 7836  | 1888.27 | 124.1 | 3.51 | 0.66  | 0.0375 | 0.0109  | 26.61 | 1.189 | 7.007  | 3.1396 | 0.02914  | 0.01392  | -0.01732 | 0.00928  | 0.00443  | -0.00552 | 0.00839  | 0.01113  | 0.00587 |
| 7837  | 1888.42 | 124.1 | 3.51 | 0.65  | 0.0403 | 0.0077  | 26.74 | 1.190 | 7.123  | 3.1398 | 0.03132  | 0.01488  | -0.01789 | 0.00998  | 0.00474  | -0.00570 | 0.00908  | 0.01143  | 0.00569 |
| 7838  | 1887.70 | 124.3 | 3.51 | 0.66  | 0.0424 | 0.0051  | 26.86 | 1.190 | 7.246  | 3.1375 | 0.03235  | 0.01726  | -0.01446 | 0.01031  | 0.00550  | -0.00461 | 0.00942  | 0.01220  | 0.00677 |
| 7839  | 1887.26 | 124.1 | 3.51 | 0.65  | 0.0406 | 0.0098  | 26.99 | 1.189 | 7.376  | 3.1382 | 0.03209  | 0.01811  | -0.01536 | 0.01022  | 0.00577  | -0.00490 | 0.00933  | 0.01247  | 0.00649 |
| 7840  | 1887.70 | 123.9 | 3.51 | 0.65  | 0.0417 | 0.0047  | 27.11 | 1.190 | 7.498  | 3.1367 | 0.03550  | 0.01890  | -0.01203 | 0.01132  | 0.00603  | -0.00383 | 0.01042  | 0.01272  | 0.00755 |
| 7841  | 1887.55 | 123.9 | 3.51 | 0.65  | 0.0399 | 0.0112  | 27.24 | 1.189 | 7.625  | 3.1393 | 0.03304  | 0.01464  | -0.01146 | 0.01053  | 0.00466  | -0.00365 | 0.00963  | 0.01136  | 0.00773 |
| 7842  | 1887.70 | 124.0 | 3.51 | 0.65  | 0.0420 | 0.0049  | 27.36 | 1.190 | 7.750  | 3.1384 | 0.03474  | 0.01083  | -0.00601 | 0.01107  | 0.00345  | -0.00191 | 0.01018  | 0.01015  | 0.00947 |
| 7843  | 1888.13 | 124.0 | 3.51 | 0.65  | 0.0403 | 0.0068  | 27.49 | 1.189 | 7.879  | 3.1390 | 0.03280  | 0.00743  | -0.00936 | 0.01045  | 0.00237  | -0.00298 | 0.00955  | 0.00906  | 0.00840 |
| 7844  | 1887.41 | 124.0 | 3.51 | 0.65  | 0.0441 | 0.0014  | 27.61 | 1.190 | 7.996  | 3.1384 | 0.03084  | 0.00486  | -0.00686 | 0.00983  | 0.00155  | -0.00219 | 0.00893  | 0.00824  | 0.00920 |
| 7845  | 1887.55 | 124.0 | 3.51 | 0.65  | 0.0424 | 0.0088  | 27.74 | 1.190 | 8.122  | 3.1385 | 0.02641  | 0.00154  | -0.00739 | 0.00842  | 0.00049  | -0.00236 | 0.00752  | 0.00718  | 0.00903 |
| 7846  | 1887.70 | 124.0 | 3.51 | 0.65  | 0.0420 | 0.0068  | 27.86 | 1.189 | 8.253  | 3.1383 | 0.02298  | 0.00101  | -0.00708 | 0.00732  | 0.00032  | -0.00225 | 0.00643  | 0.00702  | 0.00913 |
| 7847  | 1887.70 | 124.0 | 3.51 | 0.65  | 0.0430 | 0.0064  | 27.99 | 1.190 | 8.374  | 3.1384 | 0.02103  | 0.00010  | -0.00566 | 0.00670  | 0.00003  | -0.00180 | 0.00581  | 0.00673  | 0.00958 |
| 7848  | 1888.13 | 124.1 | 3.51 | 0.65  | 0.0434 | 0.0075  | 28.22 | 1.190 | 8.607  | 3.1390 | 0.01634  | -0.00870 | -0.00466 | 0.00521  | -0.00277 | -0.00149 | 0.00431  | 0.00392  | 0.00990 |
| 7849  | 1887.55 | 124.1 | 3.51 | 0.65  | 0.0427 | 0.0100  | 28.24 | 1.190 | 8.624  | 3.1375 | 0.01646  | -0.00901 | -0.00409 | 0.00525  | -0.00287 | -0.00130 | 0.00435  | 0.00382  | 0.01008 |
| 7850  | 1887.70 | 124.0 | 3.51 | 0.65  | 0.0427 | 0.0062  | 28.36 | 1.190 | 8.746  | 3.1394 | 0.01366  | -0.01563 | -0.00324 | 0.00435  | -0.00498 | -0.00103 | 0.00346  | 0.00172  | 0.01035 |
| 7851  | 1887.84 | 123.9 | 3.51 | 0.65  | 0.0417 | 0.0085  | 28.49 | 1.190 | 8.875  | 3.1376 | 0.00860  | -0.02124 | -0.00294 | 0.00274  | -0.00677 | -0.00094 | 0.00185  | -0.00007 | 0.01045 |
| 7852  | 1888.13 | 123.9 | 3.51 | 0.65  | 0.0441 | 0.0070  | 28.61 | 1.190 | 8.998  | 3.1382 | 0.00359  | -0.02924 | -0.00529 | 0.00114  | -0.00932 | -0.00168 | 0.00025  | -0.00262 | 0.00970 |
| 7853  | 1888.13 | 123.8 | 3.51 | 0.65  | 0.0434 | 0.0029  | 28.74 | 1.190 | 9.121  | 3.1392 | -0.00494 | -0.04099 | -0.00661 | -0.00157 | -0.01306 | -0.00211 | -0.00247 | -0.00636 | 0.00928 |
| 7854  | 1888.27 | 123.9 | 3.51 | 0.65  | 0.0406 | 0.0088  | 28.86 | 1.189 | 9.255  | 3.1391 | -0.01174 | -0.04558 | -0.01073 | -0.00374 | -0.01452 | -0.00342 | -0.00463 | -0.00782 | 0.00796 |
| 7855  | 1888.13 | 123.9 | 3.51 | 0.65  | 0.0437 | 0.0031  | 28.99 | 1.190 | 9.374  | 3.1390 | -0.01600 | -0.04797 | -0.01340 | -0.00510 | -0.01528 | -0.00427 | -0.00599 | -0.00859 | 0.00711 |
| 7856  | 1888.13 | 124.0 | 3.51 | 0.65  | 0.0423 | 0.0060  | 29.11 | 1.189 | 9.502  | 3.1385 | -0.02295 | -0.04963 | -0.01731 | -0.00731 | -0.01581 | -0.00552 | -0.00821 | -0.00912 | 0.00587 |
| 7857  | 1887.70 | 124.1 | 3.51 | 0.65  | 0.0434 | 0.0057  | 29.24 | 1.190 | 9.623  | 3.1374 | -0.02583 | -0.04630 | -0.02090 | -0.00823 | -0.01476 | -0.00666 | -0.00913 | -0.00806 | 0.00472 |
| 7858  | 1887.84 | 124.2 | 3.51 | 0.65  | 0.0448 | 0.0036  | 29.36 | 1.190 | 9.745  | 3.1392 | -0.03027 | -0.03808 | -0.02552 | -0.00964 | -0.01213 | -0.00813 | -0.01054 | -0.00544 | 0.00325 |
| 7859  | 1888.13 | 124.1 | 3.51 | 0.65  | 0.0437 | 0.0003  | 29.49 | 1.190 | 9.871  | 3.1389 | -0.02638 | -0.03476 | -0.02759 | -0.00840 | -0.01107 | -0.00879 | -0.00930 | -0.00438 | 0.00259 |
| 7860  | 1887.98 | 124.2 | 3.51 | 0.65  | 0.0423 | 0.0051  | 29.61 | 1.189 | 10.001 | 3.1391 | -0.01974 | -        |          |          |          |          |          |          |         |

Table A5. Concluded.

Run = 135

M = 1.60

xsppos = 39.848

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc   | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|---------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 7880  | 1887.98 | 123.8 | 3.51 | 0.65  | 0.0437 | 0.0012  | 32.11 | 1.190 | 12.494 | 3.1392 | -0.00494 | -0.02397 | -0.04808 | -0.00157 | -0.00763 | -0.01532 | -0.00247 | -0.00094 | -0.00393 |
| 7881  | 1888.13 | 123.9 | 3.51 | 0.65  | 0.0444 | -0.0031 | 32.24 | 1.190 | 12.620 | 3.1393 | -0.00260 | -0.02674 | -0.04145 | -0.00083 | -0.00852 | -0.01320 | -0.00172 | -0.00182 | -0.00182 |
| 7882  | 1888.13 | 123.9 | 3.51 | 0.66  | 0.0454 | -0.0035 | 32.36 | 1.190 | 12.741 | 3.1387 | 0.00002  | -0.02734 | -0.04176 | 0.00001  | -0.00871 | -0.01330 | -0.00089 | -0.00202 | -0.00192 |
| 7883  | 1887.84 | 124.0 | 3.51 | 0.66  | 0.0479 | -0.0059 | 32.49 | 1.190 | 12.865 | 3.1389 | -0.00034 | -0.02712 | -0.04423 | -0.00011 | -0.00864 | -0.01409 | -0.00100 | -0.00195 | -0.00271 |
| 7884  | 1887.70 | 124.3 | 3.51 | 0.65  | 0.0437 | 0.0003  | 32.61 | 1.190 | 12.997 | 3.1389 | -0.00269 | -0.02922 | -0.04599 | -0.00086 | -0.00931 | -0.01465 | -0.00175 | -0.00261 | -0.00327 |
| 7885  | 1887.70 | 124.1 | 3.51 | 0.65  | 0.0410 | -0.0003 | 32.74 | 1.189 | 13.125 | 3.1383 | -0.00341 | -0.03158 | -0.04365 | -0.00109 | -0.01006 | -0.01391 | -0.00198 | -0.00337 | -0.00253 |
| 7886  | 1887.70 | 124.2 | 3.51 | 0.65  | 0.0434 | -0.0027 | 32.86 | 1.190 | 13.246 | 3.1384 | -0.00585 | -0.03343 | -0.04543 | -0.00186 | -0.01065 | -0.01448 | -0.00276 | -0.00396 | -0.00309 |
| 7887  | 1888.42 | 123.9 | 3.51 | 0.65  | 0.0444 | -0.0022 | 32.99 | 1.190 | 13.374 | 3.1397 | -0.00697 | -0.03539 | -0.04524 | -0.00222 | -0.01127 | -0.01441 | -0.00312 | -0.00458 | -0.00303 |
| 7888  | 1888.13 | 123.9 | 3.51 | 0.65  | 0.0441 | -0.0014 | 33.11 | 1.190 | 13.495 | 3.1400 | -0.00991 | -0.03524 | -0.04600 | -0.00316 | -0.01122 | -0.01465 | -0.00405 | -0.00453 | -0.00327 |
| 7889  | 1888.27 | 124.0 | 3.51 | 0.66  | 0.0451 | -0.0027 | 33.24 | 1.190 | 13.620 | 3.1391 | -0.00973 | -0.03417 | -0.04373 | -0.00310 | -0.01089 | -0.01393 | -0.00400 | -0.00419 | -0.00255 |
| 7890  | 1888.27 | 124.0 | 3.51 | 0.66  | 0.0461 | -0.0031 | 33.36 | 1.190 | 13.740 | 3.1397 | -0.01018 | -0.02915 | -0.04512 | -0.00324 | -0.00929 | -0.01437 | -0.00414 | -0.00259 | -0.00299 |
| 7891  | 1887.70 | 124.1 | 3.51 | 0.65  | 0.0448 | -0.0048 | 33.49 | 1.190 | 13.870 | 3.1387 | -0.00621 | -0.02402 | -0.04432 | -0.00198 | -0.00765 | -0.01412 | -0.00287 | -0.00096 | -0.00274 |
| 7892  | 1887.98 | 124.2 | 3.51 | 0.65  | 0.0465 | -0.0038 | 33.61 | 1.190 | 13.993 | 3.1392 | -0.00101 | -0.02239 | -0.04393 | -0.00032 | -0.00713 | -0.01399 | -0.00122 | -0.00044 | -0.00261 |
| 7893  | 1887.98 | 124.1 | 3.51 | 0.65  | 0.0444 | -0.0012 | 33.74 | 1.190 | 14.120 | 3.1391 | 0.00199  | -0.02308 | -0.04580 | 0.00063  | -0.00735 | -0.01459 | -0.00026 | -0.00066 | -0.00321 |
| 7894  | 1888.13 | 123.9 | 3.51 | 0.65  | 0.0458 | -0.0014 | 33.86 | 1.190 | 14.242 | 3.1387 | 0.00347  | -0.02789 | -0.04462 | 0.00111  | -0.00889 | -0.01422 | 0.00021  | -0.00219 | -0.00283 |
| 7895  | 1887.70 | 123.9 | 3.51 | 0.65  | 0.0461 | -0.0012 | 33.99 | 1.190 | 14.369 | 3.1387 | 0.00119  | -0.03054 | -0.04527 | 0.00038  | -0.00973 | -0.01442 | -0.00051 | -0.00303 | -0.00304 |
| 7896  | 1888.13 | 124.1 | 3.51 | 0.66  | 0.0441 | -0.0014 | 34.11 | 1.190 | 14.493 | 3.1397 | -0.00319 | -0.03431 | -0.04544 | -0.00102 | -0.01093 | -0.01447 | -0.00191 | -0.00423 | -0.00309 |
| 7897  | 1888.27 | 124.1 | 3.51 | 0.66  | 0.0434 | -0.0018 | 34.24 | 1.190 | 14.622 | 3.1385 | -0.00589 | -0.03061 | -0.04815 | -0.00188 | -0.00975 | -0.01534 | -0.00277 | -0.00306 | -0.00396 |
| 7898  | 1888.13 | 124.1 | 3.51 | 0.65  | 0.0444 | 0.0006  | 34.36 | 1.190 | 14.745 | 3.1393 | -0.00934 | -0.02640 | -0.05047 | -0.00298 | -0.00841 | -0.01608 | -0.00387 | -0.00171 | -0.00469 |
| 7899  | 1887.98 | 124.1 | 3.51 | 0.65  | 0.0444 | -0.0031 | 34.49 | 1.190 | 14.871 | 3.1387 | -0.00556 | -0.01981 | -0.04748 | -0.00177 | -0.00631 | -0.01513 | -0.00267 | 0.00038  | -0.00374 |
| 7900  | 1888.27 | 124.0 | 3.51 | 0.65  | 0.0417 | -0.0009 | 34.61 | 1.189 | 15.002 | 3.1390 | 0.00060  | -0.01575 | -0.04706 | 0.00019  | -0.00502 | -0.01499 | -0.00071 | 0.00168  | -0.00361 |
| 7901  | 1888.27 | 124.1 | 3.51 | 0.66  | 0.0420 | -0.0025 | 34.74 | 1.190 | 15.123 | 3.1396 | 0.00447  | -0.01648 | -0.03942 | 0.00142  | -0.00525 | -0.01256 | 0.00053  | 0.00145  | -0.00117 |
| 7902  | 1887.98 | 124.1 | 3.51 | 0.65  | 0.0417 | 0.0010  | 34.86 | 1.190 | 15.250 | 3.1392 | 0.00732  | -0.01670 | -0.03539 | 0.00233  | -0.00532 | -0.01127 | 0.00144  | 0.00137  | 0.00011  |
| 7903  | 1887.55 | 124.1 | 3.51 | 0.65  | 0.0437 | -0.0016 | 34.99 | 1.190 | 15.373 | 3.1386 | 0.00726  | -0.01568 | -0.03481 | 0.00231  | -0.00500 | -0.01109 | 0.00142  | 0.00170  | 0.00029  |
| 7904  | 1887.84 | 123.9 | 3.51 | 0.65  | 0.0444 | -0.0022 | 35.11 | 1.190 | 15.495 | 3.1378 | 0.00898  | -0.01637 | -0.03749 | 0.00286  | -0.00522 | -0.01195 | 0.00197  | 0.00148  | -0.00057 |
| 7905  | 1888.42 | 123.9 | 3.51 | 0.65  | 0.0427 | -0.0050 | 35.24 | 1.190 | 15.621 | 3.1398 | 0.00757  | -0.02050 | -0.04081 | 0.00241  | -0.00653 | -0.01300 | 0.00151  | 0.00017  | -0.00162 |
| 7906  | 1887.98 | 123.9 | 3.51 | 0.65  | 0.0413 | -0.0020 | 35.36 | 1.190 | 15.750 | 3.1384 | 0.00750  | -0.01920 | -0.04508 | 0.00239  | -0.00612 | -0.01436 | 0.00149  | 0.00058  | -0.00298 |
| 7907  | 1887.84 | 123.9 | 3.51 | 0.66  | 0.0448 | -0.0029 | 35.49 | 1.190 | 15.868 | 3.1391 | 0.00591  | -0.02129 | -0.04585 | 0.00188  | -0.00678 | -0.01461 | 0.00099  | -0.00009 | -0.00323 |
| 7908  | 1887.84 | 124.2 | 3.51 | 0.65  | 0.0417 | -0.0027 | 35.61 | 1.189 | 16.002 | 3.1387 | 0.00435  | -0.01971 | -0.04637 | 0.00139  | -0.00628 | -0.01477 | 0.00049  | 0.00042  | -0.00339 |
| 7909  | 1888.42 | 124.2 | 3.51 | 0.66  | 0.0448 | -0.0076 | 35.74 | 1.190 | 16.116 | 3.1400 | 0.00271  | -0.02155 | -0.04117 | 0.00086  | -0.00686 | -0.01311 | -0.00003 | -0.00017 | -0.00173 |
| 7910  | 1887.98 | 124.3 | 3.51 | 0.65  | 0.0413 | -0.0039 | 35.86 | 1.189 | 16.252 | 3.1386 | 0.00381  | -0.02041 | -0.03447 | 0.00121  | -0.00650 | -0.01098 | 0.00032  | 0.00019  | 0.00040  |
| 7911  | 1887.98 | 124.2 | 3.51 | 0.65  | 0.0437 | -0.0035 | 35.99 | 1.190 | 16.370 | 3.1387 | 0.00452  | -0.02108 | -0.03424 | 0.00144  | -0.00672 | -0.01091 | 0.00055  | -0.00002 | 0.00047  |
| 7912  | 1887.98 | 124.1 | 3.51 | 0.66  | 0.0444 | -0.0078 | 36.11 | 1.190 | 16.495 | 3.1394 | 0.00359  | -0.02002 | -0.03184 | 0.00114  | -0.00638 | -0.01014 | 0.00025  | 0.00032  | 0.00124  |
| 7913  | 1888.13 | 124.1 | 3.51 | 0.65  | 0.0427 | -0.0050 | 36.24 | 1.190 | 16.623 | 3.1391 | 0.00256  | -0.02189 | -0.03195 | 0.00082  | -0.00697 | -0.01018 | -0.00008 | -0.00028 | 0.00121  |
| 7914  | 1887.84 | 124.0 | 3.51 | 0.65  | 0.0430 | -0.0020 | 36.36 | 1.189 | 16.750 | 3.1380 | 0.00321  | -0.01988 | -0.03228 | 0.00102  | -0.00633 | -0.01029 | 0.00013  | 0.00036  | 0.00109  |
| 7915  | 1888.13 | 124.0 | 3.51 | 0.65  | 0.0448 | -0.0076 | 36.49 | 1.190 | 16.872 | 3.1392 | 0.00358  | -0.02053 | -0.03355 | 0.00114  | -0.00654 | -0.01069 | 0.00025  | 0.00015  | 0.00069  |
| 7916  | 1887.84 | 124.0 | 3.51 | 0.65  | 0.0420 | -0.0063 | 36.61 | 1.189 | 17.000 | 3.1394 | 0.00440  | -0.02065 | -0.03316 | 0.00140  | -0.00658 | -0.01056 | 0.00050  | 0.00012  | 0.00082  |
| 7917  | 1888.27 | 123.7 | 3.51 | 0.66  | 0.0448 | -0.0066 | 36.74 | 1.190 | 17.116 | 3.1401 | 0.00395  | -0.02180 | -0.03523 | 0.00126  | -0.00694 | -0.01122 | 0.00036  | -0.00025 | 0.00016  |
| 7918  | 1887.98 | 123.8 | 3.51 | 0.66  | 0.0437 | -0.0035 | 36.86 | 1.190 | 17.240 | 3.1389 | 0.00401  | -0.02052 | -0.03616 | 0.00128  | -0.00654 | -0.01152 | 0.00038  | 0.00016  | -0.00014 |
| 7919  | 1888.13 | 123.9 | 3.51 | 0.65  | 0.0434 | -0.0037 | 36.99 | 1.190 | 17.372 | 3.1384 | 0.00677  | -0.02009 | -0.03412 | 0.00216  | -0.00640 | -0.01087 | 0.00126  | 0.00029  | 0.00051  |
| 7920  | 1888.56 | 124.0 | 3.51 | 0.65  | 0.0427 | -0.0050 | 37.11 | 1.190 | 17.496 | 3.1401 | 0.00306  | -0.02121 | -0.03498 | 0.00098  | -0.00675 | -0.01114 | 0.00008  | -0.00006 | 0.00024  |
| 7921  | 1888.42 | 123.9 | 3.51 | 0.65  | 0.0430 | -0.0029 | 37.24 | 1.189 | 17.624 | 3.1394 | 0.00396  | -0.01951 | -0.03528 | 0.00126  | -0.00622 | -0.01124 | 0.00037  | 0.00048  | 0.00015  |
| 7922  | 1887.98 | 124.1 | 3.51 | 0.65  | 0.0444 | -0.0022 | 37.36 | 1.190 | 17.747 | 3.1395 | 0.00290  | -0.02061 | -0.03617 | 0.00092  | -0.00656 | -0.01152 | 0.00003  | 0.00013  | -0.00014 |
| 7923  | 1888.42 | 124.1 | 3.51 | 0.65  | 0.0441 | -0.0051 | 37.49 | 1.190 | 17.874 | 3.1400 | 0.00381  | -0.02036 | -0.03546 | 0.00121  | -0.00649 | -0.01129 | 0.00032  | 0.00021  | 0.00009  |
| 7924  | 1887.84 | 124.0 | 3.51 | 0.65  | 0.0437 | -0.0044 | 37.61 | 1.190 | 17.996 | 3.1388 | 0.00348  | -0.01828 | -0.03412 | 0.00111  | -0.00583 | -0.01087 | 0.00021  | 0.00087  | 0.00051  |
| 7925  | 1888.13 | 124.0 | 3.51 | 0.65  | 0.0403 | 0.0002  | 37.74 | 1.189 | 18.130 | 3.1390 | 0.00324  | -0.02042 | -0.03624 | 0.00103  | -0.00651 | -0.01154 | 0.00014  | 0.00019  | -0.00016 |
| 7926  | 1887.70 | 124.1 | 3.51 | 0.65  | 0.0389 | 0.0014  | 37.86 | 1.189 | 18.251 | 3.1387 | 0.00495  | -0.01885 | -0.03661 | 0.00158  | -0.00601 | -0.01166 | 0.00068  | 0.00069  | -0.00028 |
| 7927  | 1887.84 | 123.9 | 3.51 | 0.65  | 0.0413 | 0.0008  | 37.99 | 1.189 | 18.379 | 3.1382 | 0.00313  | -0.01976 | -0.03606 | 0.00100  | -0.00630 | -0.01149 | 0.00010  | 0.00040  | -0.00011 |

Table A6. Run 136.

Run = 136

M = 1.60

xsppos = 42.346

| point | p0      | t0    | rnft | alpha | cnmrc   | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|---------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 7928  | 1887.70 | 124.1 | 3.51 | -0.24 | -0.0020 | 0.0469 | 21.36 | 1.668 | -6.137 | 3.1373 | -0.00939 | 0.03233 | -0.03442 | -0.00299 | 0.01030 | -0.01097 | -0.00006 | 0.00033  | 0.00003  |
| 7929  | 1888.13 | 124.2 | 3.51 | -0.24 | -0.0026 | 0.0410 | 21.48 | 1.668 | -6.011 | 3.1394 | -0.01010 | 0.03138 | -0.03521 | -0.00322 | 0.01000 | -0.01122 | -0.00028 | 0.00003  | -0.00022 |
| 7930  | 1888.56 | 124.1 | 3.51 | -0.24 | -0.0037 | 0.0432 | 21.61 | 1.668 | -5.886 | 3.1398 | -0.00831 | 0.03072 | -0.03420 | -0.00265 | 0.00978 | -0.01089 | 0.00029  | -0.00019 | 0.00011  |
| 7931  | 1887.98 | 124.1 | 3.51 | -0.24 | -0.0006 | 0.0393 | 21.73 | 1.668 | -5.766 | 3.1392 | -0.00886 | 0.03081 | -0.03386 | -0.00282 | 0.00981 | -0.01079 | 0.00011  | -0.00016 | 0.00022  |
| 7932  | 1887.41 | 124.3 | 3.51 | -0.24 | -0.0023 | 0.0374 | 21.86 | 1.668 | -5.638 | 3.1381 | -0.00940 | 0.03124 | -0.03498 | -0.00300 | 0.00996 | -0.01115 | -0.00006 | -0.00001 | -0.00014 |
| 7933  | 1888.13 | 124.3 | 3.51 | -0.23 | -0.0012 | 0.0352 | 21.98 | 1.668 | -5.518 | 3.1392 | -0.01047 | 0.03140 | -0.03426 | -0.00334 | 0.01000 | -0.01091 | -0.00040 | 0.00003  | 0.00009  |
| 7934  | 1888.13 | 124.1 | 3.51 | -0.23 | -0.0036 | 0.0329 | 22.11 | 1.668 | -5.393 | 3.1399 | -0.00939 | 0.03095 | -0.03541 | -0.00299 | 0.00986 | -0.01128 | -0.00006 | -0.00011 | -0.00027 |
| 7935  | 1888.13 | 124.1 | 3.51 | -0.23 | -0.0009 | 0.0279 | 22.23 | 1.669 | -5.276 | 3.1392 | -0.00960 | 0.03266 | -0.03564 | -0.00306 | 0.01041 | -0.01135 | -0.00012 | 0.00043  | -0.00035 |
| 7936  | 1887.70 | 124.1 | 3.51 | -0.22 | -0.0036 | 0.0339 | 22.36 | 1.668 | -5.149 | 3.1382 | -0.00814 | 0.03243 | -0.03330 | -0.00259 | 0.01033 | -0.01061 | 0.00034  | 0.00036  | 0.00039  |
| 7937  | 1888.27 | 123.9 | 3.51 | -0.22 | -0.0002 | 0.0311 | 22.48 | 1.669 | -5.034 | 3.1389 | -0.00939 | 0.03147 | -0.03415 | -0.00299 | 0.01003 | -0.01088 | -0.00005 | 0.00006  | 0.00012  |
| 7938  | 1888.27 | 124.1 | 3.51 | -0.22 | -0.0009 | 0.0317 | 22.61 | 1.669 | -4.901 | 3.1385 | -0.01013 | 0.03069 | -0.03490 | -0.00323 | 0.00978 | -0.01112 | -0.00029 | -0.00019 | -0.00012 |
| 7939  | 1888.27 | 124.0 | 3.51 | -0.21 | 0.0015  | 0.0330 | 22.73 | 1.669 | -4.789 | 3.1400 | -0.00974 | 0.03256 | -0.03636 | -0.00310 | 0.01037 | -0.01158 | -0.00017 | 0.00040  | -0.00058 |
| 7940  | 1888.13 | 124.0 | 3.51 | -0.21 | 0.0042  | 0.0364 | 22.86 | 1.670 | -4.670 | 3.1393 | -0.00723 | 0.03278 | -0.03632 | -0.00230 | 0.01044 | -0.01157 | 0.00063  | 0.00047  | -0.00057 |
| 7941  | 1887.98 | 124.1 | 3.51 | -0.23 | -0.0030 | 0.0417 | 22.98 | 1.668 | -4.520 | 3.1394 | -0.00905 | 0.03307 | -0.03610 | -0.00288 | 0.01054 | -0.01150 | 0.00005  | 0.00056  | -0.00050 |
| 7942  | 1888.13 | 124.0 | 3.51 | -0.22 | -0.0054 | 0.0478 | 23.11 | 1.669 | -4.399 | 3.1388 | -0.00928 | 0.03108 | -0.03342 | -0.00296 | 0.00990 | -0.01065 | -0.00002 | -0.00007 | 0.00035  |
| 7943  | 1888.13 | 124.1 | 3.51 | -0.22 | -0.0023 | 0.0430 | 23.23 | 1.669 | -4.278 | 3.1398 | -0.00995 | 0.03172 | -0.03465 | -0.00317 | 0.01010 | -0.01104 | -0.00023 | 0.00013  | -0.00004 |
| 7944  | 1887.84 | 124.1 | 3.51 | -0.22 | -0.0019 | 0.0451 | 23.36 | 1.669 | -4.154 | 3.1385 | -0.00893 | 0.03341 | -0.03364 | -0.00284 | 0.01064 | -0.01072 | 0.00009  | 0.00067  | 0.00028  |
| 7945  | 1888.13 | 124.0 | 3.51 | -0.22 | -0.0040 | 0.0411 | 23.48 | 1.669 | -4.026 | 3.1390 | -0.00988 | 0.03159 | -0.03415 | -0.00315 | 0.01006 | -0.01088 | -0.00021 | 0.00009  | 0.00012  |
| 7946  | 1887.84 | 124.0 | 3.51 | -0.22 | -0.0016 | 0.0415 | 23.61 | 1.669 | -3.907 | 3.1387 | -0.00776 | 0.03107 | -0.03465 | -0.00247 | 0.00990 | -0.01104 | 0.00046  | -0.00007 | -0.00004 |
| 7947  | 1887.98 | 124.0 | 3.51 | -0.22 | -0.0023 | 0.0411 | 23.73 | 1.669 | -3.776 | 3.1383 | -0.00861 | 0.03192 | -0.03437 | -0.00274 | 0.01017 | -0.01095 | 0.00019  | 0.00020  | 0.00005  |
| 7948  | 1887.84 | 124.1 | 3.51 | -0.22 | -0.0002 | 0.0386 | 23.86 | 1.669 | -3.659 | 3.1384 | -0.00828 | 0.03284 | -0.03362 | -0.00264 | 0.01046 | -0.01071 | 0.00030  | 0.00049  | 0.00029  |
| 7949  | 1887.98 | 124.1 | 3.51 | -0.22 | -0.0054 | 0.0413 | 23.98 | 1.669 | -3.526 | 3.1391 | -0.00906 | 0.03100 | -0.03585 | -0.00289 | 0.00987 | -0.01142 | 0.00005  | -0.00010 | -0.00042 |
| 7950  | 1888.13 | 124.2 | 3.51 | -0.23 | -0.0043 | 0.0437 | 24.11 | 1.668 | -3.396 | 3.1394 | -0.00858 | 0.03262 | -0.03645 | -0.00273 | 0.01039 | -0.01161 | 0.00020  | 0.00042  | -0.00061 |
| 7951  | 1887.84 | 124.0 | 3.51 | -0.22 | -0.0013 | 0.0408 | 24.23 | 1.669 | -3.282 | 3.1391 | -0.00937 | 0.03398 | -0.03569 | -0.00299 | 0.01082 | -0.01137 | -0.00005 | 0.00085  | -0.00037 |
| 7952  | 1888.13 | 124.1 | 3.51 | -0.23 | -0.0037 | 0.0441 | 24.36 | 1.668 | -3.142 | 3.1387 | -0.00682 | 0.03529 | -0.03406 | -0.00217 | 0.01124 | -0.01085 | 0.00076  | 0.00127  | 0.00015  |
| 7953  | 1887.84 | 124.2 | 3.51 | -0.23 | -0.0043 | 0.0447 | 24.48 | 1.668 | -3.020 | 3.1386 | -0.00682 | 0.03523 | -0.03430 | -0.00217 | 0.01122 | -0.01093 | 0.00076  | 0.00125  | 0.00007  |
| 7954  | 1887.70 | 124.4 | 3.50 | -0.22 | -0.0043 | 0.0447 | 24.61 | 1.669 | -2.904 | 3.1392 | -0.00441 | 0.03126 | -0.03583 | -0.00140 | 0.00996 | -0.01141 | 0.00153  | -0.00001 | -0.00041 |
| 7955  | 1887.84 | 124.4 | 3.51 | -0.24 | -0.0054 | 0.0422 | 24.73 | 1.668 | -2.762 | 3.1392 | -0.00754 | 0.03101 | -0.03599 | -0.00240 | 0.00988 | -0.01147 | 0.00053  | -0.00009 | -0.00046 |
| 7956  | 1888.13 | 124.0 | 3.51 | -0.25 | -0.0050 | 0.0424 | 24.86 | 1.667 | -2.630 | 3.1392 | -0.00718 | 0.02989 | -0.03605 | -0.00229 | 0.00952 | -0.01148 | 0.00065  | -0.00045 | -0.00048 |
| 7957  | 1888.27 | 124.1 | 3.51 | -0.24 | -0.0044 | 0.0465 | 24.98 | 1.667 | -2.508 | 3.1390 | -0.01099 | 0.03087 | -0.03486 | -0.00350 | 0.00983 | -0.01110 | -0.00056 | -0.00014 | -0.00010 |
| 7958  | 1887.84 | 124.4 | 3.51 | -0.24 | -0.0043 | 0.0428 | 25.11 | 1.668 | -2.388 | 3.1392 | -0.01076 | 0.03278 | -0.03462 | -0.00343 | 0.01044 | -0.01103 | -0.00049 | 0.00047  | -0.00003 |
| 7959  | 1888.13 | 124.3 | 3.51 | -0.25 | -0.0071 | 0.0487 | 25.24 | 1.667 | -2.251 | 3.1385 | -0.00930 | 0.03520 | -0.03607 | -0.00296 | 0.01122 | -0.01149 | -0.00003 | 0.00125  | -0.00049 |
| 7960  | 1887.84 | 124.3 | 3.51 | -0.24 | -0.0040 | 0.0439 | 25.36 | 1.668 | -2.134 | 3.1395 | -0.00763 | 0.03748 | -0.03399 | -0.00243 | 0.01194 | -0.01083 | 0.00051  | 0.00197  | 0.00018  |
| 7961  | 1887.70 | 124.2 | 3.51 | -0.23 | -0.0033 | 0.0471 | 25.48 | 1.668 | -2.017 | 3.1392 | -0.00702 | 0.03811 | -0.03271 | -0.00224 | 0.01214 | -0.01042 | 0.00070  | 0.00217  | 0.00058  |
| 7962  | 1887.84 | 124.3 | 3.51 | -0.25 | -0.0040 | 0.0467 | 25.61 | 1.667 | -1.879 | 3.1383 | -0.00297 | 0.03775 | -0.03141 | -0.00095 | 0.01203 | -0.01001 | 0.00199  | 0.00206  | 0.00099  |
| 7963  | 1888.13 | 124.3 | 3.51 | -0.23 | -0.0016 | 0.0443 | 25.73 | 1.668 | -1.769 | 3.1382 | -0.00254 | 0.03662 | -0.03072 | -0.00081 | 0.01167 | -0.00979 | 0.00212  | 0.00170  | 0.00121  |
| 7964  | 1887.70 | 124.2 | 3.51 | -0.25 | -0.0068 | 0.0471 | 25.86 | 1.667 | -1.625 | 3.1392 | -0.00542 | 0.03011 | -0.03337 | -0.00173 | 0.00959 | -0.01063 | 0.00121  | -0.00038 | 0.00037  |
| 7965  | 1887.84 | 124.1 | 3.51 | -0.25 | -0.0050 | 0.0452 | 25.98 | 1.667 | -1.506 | 3.1385 | -0.00774 | 0.02966 | -0.03341 | -0.00247 | 0.00945 | -0.01065 | 0.00047  | -0.00052 | 0.00036  |
| 7966  | 1887.55 | 124.0 | 3.51 | -0.25 | -0.0071 | 0.0469 | 26.11 | 1.667 | -1.373 | 3.1390 | -0.00934 | 0.02794 | -0.03578 | -0.00298 | 0.00890 | -0.01140 | -0.00004 | -0.00107 | -0.00040 |
| 7967  | 1888.27 | 123.9 | 3.51 | -0.24 | -0.0050 | 0.0480 | 26.23 | 1.668 | -1.261 | 3.1393 | -0.01125 | 0.02923 | -0.03554 | -0.00358 | 0.00931 | -0.01132 | -0.00065 | -0.00066 | -0.00032 |
| 7968  | 1888.13 | 124.0 | 3.51 | -0.25 | -0.0037 | 0.0441 | 26.36 | 1.667 | -1.131 | 3.1393 | -0.01228 | 0.03384 | -0.03367 | -0.00391 | 0.01078 | -0.01073 | -0.00097 | 0.00081  | 0.00028  |
| 7969  | 1888.42 | 124.0 | 3.51 | -0.24 | -0.0081 | 0.0444 | 26.48 | 1.667 | -1.005 | 3.1397 | -0.00940 | 0.03911 | -0.03219 | -0.00299 | 0.01246 | -0.01025 | -0.00006 | 0.00249  | 0.00075  |
| 7970  | 1887.55 | 123.9 | 3.51 | -0.24 | -0.0040 | 0.0421 | 26.61 | 1.668 | -0.885 | 3.1377 | -0.00563 | 0.04260 | -0.02949 | -0.00179 | 0.01358 | -0.00940 | 0.00114  | 0.00360  | 0.00160  |
| 7971  | 1887.70 | 123.7 | 3.51 | -0.24 | -0.0061 | 0.0447 | 26.73 | 1.667 | -0.757 | 3.1391 | -0.00247 | 0.04170 | -0.02999 | -0.00079 | 0.01328 | -0.00955 | 0.00215  | 0.00331  | 0.00145  |
| 7972  | 1888.13 | 124.0 | 3.51 | -0.23 | -0.0050 | 0.0471 | 26.86 | 1.668 | -0.648 | 3.1390 | -0.00002 | 0.03950 | -0.02663 | -0.00001 | 0.01258 | -0.00848 | 0.00293  | 0.00261  | 0.00252  |
| 7973  | 1887.84 | 124.1 | 3.51 | -0.25 | -0.0092 | 0.0448 | 26.98 | 1.667 | -0.494 | 3.1392 | -0.00142 | 0.03413 | -0.03052 | -0.00045 | 0.01087 | -0.00972 | 0.00248  | 0.00090  | 0.00128  |
| 7974  | 1888.13 | 124.1 | 3.51 | -0.25 | -0.0074 | 0.0467 | 27.11 | 1.667 | -0.375 | 3.1395 | -0.00328 | 0.03253 | -0.03262 | -0.00104 | 0.01036 | -0.01039 | 0.00189  | 0.00039  | 0.00061  |
| 7975  | 1888.56 | 124.1 | 3.51 | -0.24 | -0.0054 | 0.0460 | 27.24 | 1.668 | -0.260 | 3.1389 | -0.00566 | 0.03048 | -0.03471 | -0.00180 | 0.00971 | -0.01106 | 0.00113  | -0.00026 | -0.00006 |
| 7976  | 1887.70 | 124.1 | 3.51 | -0.26 | -0.0078 | 0.0484 | 27.36 | 1.667 | -0.119 | 3.1385 | -0.01015 | 0.03044 | -0.03693 | -0.00323 | 0.00970 | -0.01177 | -0.00030 | -0.00027 | -0.00076 |
| 7977  | 1887.98 | 124.0 | 3.51 | -0.26 | -0.0085 | 0.0461 | 27.48 | 1.667 | 0.007  | 3.1398 | -0.01137 | 0.03512 | -0.03657 | -0.00362 | 0.01119 | -0.01165 | -0.00068 | 0.00121  | -0.00065 |
| 7978  | 1887.84 | 123.8 | 3.51 | -0.25 | -0.0047 | 0.0445 | 27.61 | 1.667 | 0.120  | 3.1382 | -0.00893 | 0.04062 | -0.03402 | -0.00284 | 0.01295 | -0.01084 | 0.00009  | 0.00297  | 0.00016  |
| 7979  | 1888.13 | 124.0 | 3.51 | -0.25 | -0.0047 | 0.0454 | 27.73 | 1.667 | 0.245  | 3.1387 | -0.00669 | 0.04212 | -0.02792 | -0.00213 | 0.01342 | -0.00889 | 0.00080  | 0.00345  | 0.00211  |
| 7980  | 1887.98 | 124.1 | 3.51 | -0.25 | -0.0061 | 0.0437 | 27.86 | 1.667 | 0.372  | 3.1385 | 0.00029  | 0.04289 | -0.02466 | 0.00009  | 0.01367 | -0.00786 | 0.00303  | 0.00370  | 0.00314  |
| 7981  | 1888.13 | 124.1 | 3.51 | -0.23 | -0.0033 | 0.0406 | 27.98 | 1.668 | 0.479  | 3.1393 | 0.00063  |         |          |          |         |          |          |          |          |

Table A6. Continued.

Run = 136

M = 1.60

xsppos = 42.346

| point | p0      | t0    | rnft | alpha | cnmrc   | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c  |
|-------|---------|-------|------|-------|---------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|---------|
| 8001  | 1887.84 | 124.1 | 3.51 | -0.22 | -0.0013 | 0.0380 | 30.48 | 1.669 | 2.971  | 3.1384 | 0.00038  | 0.04018 | -0.02308 | 0.00012  | 0.01280 | -0.00736 | 0.00306  | 0.00283  | 0.00365 |
| 8002  | 1887.98 | 124.1 | 3.51 | -0.22 | -0.0002 | 0.0395 | 30.68 | 1.669 | 3.170  | 3.1384 | -0.00078 | 0.04185 | -0.02473 | -0.00025 | 0.01333 | -0.00788 | 0.00269  | 0.00336  | 0.00312 |
| 8003  | 1887.98 | 124.2 | 3.51 | -0.22 | -0.0019 | 0.0395 | 30.73 | 1.669 | 3.223  | 3.1389 | 0.00027  | 0.04145 | -0.02564 | 0.00009  | 0.01320 | -0.00817 | 0.00302  | 0.00323  | 0.00283 |
| 8004  | 1887.55 | 124.1 | 3.51 | -0.24 | -0.0002 | 0.0386 | 30.86 | 1.668 | 3.358  | 3.1387 | -0.00192 | 0.04064 | -0.02450 | -0.00061 | 0.01295 | -0.00781 | 0.00232  | 0.00298  | 0.00320 |
| 8005  | 1887.70 | 124.1 | 3.51 | -0.23 | -0.0026 | 0.0410 | 30.98 | 1.668 | 3.480  | 3.1380 | 0.00073  | 0.04312 | -0.02539 | 0.00023  | 0.01374 | -0.00809 | 0.00317  | 0.00377  | 0.00291 |
| 8006  | 1888.13 | 123.9 | 3.51 | -0.22 | 0.0005  | 0.0417 | 31.11 | 1.669 | 3.595  | 3.1393 | -0.00037 | 0.04276 | -0.02660 | -0.00012 | 0.01362 | -0.00847 | 0.00282  | 0.00365  | 0.00253 |
| 8007  | 1887.84 | 124.2 | 3.51 | -0.23 | -0.0002 | 0.0404 | 31.23 | 1.668 | 3.729  | 3.1385 | 0.00090  | 0.04258 | -0.02554 | 0.00029  | 0.01357 | -0.00814 | 0.00322  | 0.00360  | 0.00286 |
| 8008  | 1887.98 | 124.1 | 3.51 | -0.22 | 0.0001  | 0.0434 | 31.36 | 1.669 | 3.846  | 3.1392 | 0.00120  | 0.04188 | -0.02539 | 0.00038  | 0.01334 | -0.00809 | 0.00332  | 0.00337  | 0.00291 |
| 8009  | 1887.98 | 124.0 | 3.51 | -0.23 | -0.0016 | 0.0425 | 31.48 | 1.668 | 3.981  | 3.1388 | 0.00202  | 0.04167 | -0.02508 | 0.00064  | 0.01328 | -0.00799 | 0.00358  | 0.00331  | 0.00301 |
| 8010  | 1888.27 | 123.9 | 3.51 | -0.22 | 0.0001  | 0.0415 | 31.61 | 1.669 | 4.097  | 3.1392 | 0.00153  | 0.03940 | -0.02568 | 0.00049  | 0.01255 | -0.00818 | 0.00342  | 0.00258  | 0.00282 |
| 8011  | 1888.27 | 123.9 | 3.51 | -0.22 | 0.0008  | 0.0410 | 31.74 | 1.669 | 4.224  | 3.1394 | 0.00087  | 0.04015 | -0.02648 | 0.00028  | 0.01279 | -0.00844 | 0.00321  | 0.00282  | 0.00257 |
| 8012  | 1888.13 | 124.1 | 3.51 | -0.22 | -0.0002 | 0.0441 | 31.86 | 1.669 | 4.349  | 3.1396 | -0.00061 | 0.03945 | -0.02489 | -0.00019 | 0.01257 | -0.00793 | 0.00274  | 0.00260  | 0.00307 |
| 8013  | 1887.98 | 124.2 | 3.51 | -0.21 | 0.0022  | 0.0399 | 31.98 | 1.669 | 4.462  | 3.1396 | -0.00178 | 0.04143 | -0.02498 | -0.00057 | 0.01320 | -0.00796 | 0.00237  | 0.00322  | 0.00305 |
| 8014  | 1888.13 | 124.1 | 3.51 | -0.21 | 0.0025  | 0.0363 | 32.11 | 1.670 | 4.586  | 3.1389 | -0.00021 | 0.04433 | -0.02317 | -0.00007 | 0.01412 | -0.00738 | 0.00287  | 0.00415  | 0.00362 |
| 8015  | 1887.98 | 124.3 | 3.51 | -0.20 | 0.0046  | 0.0393 | 32.23 | 1.670 | 4.702  | 3.1392 | 0.00058  | 0.04398 | -0.02333 | 0.00019  | 0.01401 | -0.00743 | 0.00312  | 0.00404  | 0.00357 |
| 8016  | 1887.84 | 124.2 | 3.51 | -0.21 | 0.0015  | 0.0386 | 32.36 | 1.669 | 4.838  | 3.1391 | 0.00422  | 0.04417 | -0.02291 | 0.00134  | 0.01407 | -0.00730 | 0.00428  | 0.00410  | 0.00370 |
| 8017  | 1887.98 | 124.1 | 3.51 | -0.22 | -0.0002 | 0.0423 | 32.48 | 1.669 | 4.971  | 3.1386 | 0.00462  | 0.04575 | -0.02137 | 0.00147  | 0.01458 | -0.00681 | 0.00441  | 0.00460  | 0.00419 |
| 8018  | 1888.42 | 124.4 | 3.51 | -0.22 | 0.0005  | 0.0417 | 32.61 | 1.669 | 5.092  | 3.1404 | 0.00404  | 0.04454 | -0.02436 | 0.00129  | 0.01418 | -0.00776 | 0.00422  | 0.00421  | 0.00325 |
| 8019  | 1888.42 | 124.2 | 3.51 | -0.20 | 0.0060  | 0.0364 | 32.73 | 1.670 | 5.195  | 3.1396 | 0.00425  | 0.04267 | -0.02335 | 0.00135  | 0.01359 | -0.00744 | 0.00429  | 0.00362  | 0.00357 |
| 8020  | 1887.84 | 124.2 | 3.51 | -0.20 | 0.0032  | 0.0414 | 32.86 | 1.670 | 5.330  | 3.1389 | 0.00327  | 0.04167 | -0.02451 | 0.00104  | 0.01327 | -0.00781 | 0.00398  | 0.00330  | 0.00319 |
| 8021  | 1887.84 | 124.1 | 3.51 | -0.21 | 0.0008  | 0.0429 | 32.98 | 1.669 | 5.462  | 3.1386 | 0.00258  | 0.04310 | -0.02435 | 0.00082  | 0.01373 | -0.00776 | 0.00376  | 0.00376  | 0.00324 |
| 8022  | 1887.84 | 124.2 | 3.51 | -0.22 | -0.0026 | 0.0447 | 33.11 | 1.669 | 5.600  | 3.1393 | 0.00068  | 0.03997 | -0.02479 | 0.00022  | 0.01273 | -0.00790 | 0.00315  | 0.00276  | 0.00311 |
| 8023  | 1888.70 | 124.5 | 3.51 | -0.22 | 0.0005  | 0.0426 | 33.23 | 1.669 | 5.719  | 3.1394 | 0.00055  | 0.04070 | -0.02204 | 0.00018  | 0.01296 | -0.00702 | 0.00311  | 0.00299  | 0.00398 |
| 8024  | 1887.98 | 124.4 | 3.50 | -0.22 | -0.0026 | 0.0475 | 33.36 | 1.669 | 5.848  | 3.1393 | 0.00043  | 0.03824 | -0.02006 | 0.00014  | 0.01218 | -0.00639 | 0.00307  | 0.00221  | 0.00461 |
| 8025  | 1887.84 | 124.3 | 3.51 | -0.22 | 0.0011  | 0.0430 | 33.48 | 1.669 | 5.965  | 3.1384 | 0.00012  | 0.03949 | -0.01864 | 0.00004  | 0.01258 | -0.00594 | 0.00297  | 0.00261  | 0.00506 |
| 8026  | 1887.98 | 124.2 | 3.51 | -0.21 | -0.0019 | 0.0423 | 33.61 | 1.669 | 6.090  | 3.1384 | -0.00117 | 0.03994 | -0.01870 | -0.00037 | 0.01273 | -0.00596 | 0.00256  | 0.00276  | 0.00504 |
| 8027  | 1888.13 | 124.2 | 3.51 | -0.22 | -0.0016 | 0.0397 | 33.73 | 1.669 | 6.220  | 3.1394 | -0.00068 | 0.04028 | -0.02021 | -0.00022 | 0.01283 | -0.00644 | 0.00272  | 0.00286  | 0.00456 |
| 8028  | 1887.70 | 124.2 | 3.51 | -0.23 | -0.0019 | 0.0423 | 33.86 | 1.668 | 6.353  | 3.1383 | 0.00073  | 0.04168 | -0.02099 | 0.00023  | 0.01328 | -0.00669 | 0.00317  | 0.00331  | 0.00431 |
| 8029  | 1888.27 | 124.2 | 3.51 | -0.23 | -0.0030 | 0.0417 | 33.98 | 1.668 | 6.485  | 3.1392 | 0.00151  | 0.04151 | -0.02162 | 0.00048  | 0.01322 | -0.00689 | 0.00342  | 0.00325  | 0.00411 |
| 8030  | 1887.84 | 124.1 | 3.51 | -0.22 | -0.0023 | 0.0412 | 34.11 | 1.669 | 6.600  | 3.1383 | 0.00165  | 0.04094 | -0.02223 | 0.00053  | 0.01305 | -0.00708 | 0.00346  | 0.00308  | 0.00392 |
| 8031  | 1887.55 | 124.2 | 3.51 | -0.24 | -0.0043 | 0.0438 | 34.11 | 1.668 | 6.614  | 3.1384 | 0.00166  | 0.04084 | -0.02196 | 0.00053  | 0.01301 | -0.00700 | 0.00346  | 0.00304  | 0.00400 |
| 8032  | 1887.84 | 124.2 | 3.51 | -0.23 | -0.0026 | 0.0391 | 34.23 | 1.668 | 6.732  | 3.1386 | 0.00200  | 0.04109 | -0.02152 | 0.00064  | 0.01309 | -0.00686 | 0.00357  | 0.00312  | 0.00415 |
| 8033  | 1887.84 | 124.3 | 3.51 | -0.22 | -0.0037 | 0.0451 | 34.36 | 1.669 | 6.849  | 3.1388 | 0.00084  | 0.04178 | -0.02514 | 0.00027  | 0.01331 | -0.00801 | 0.00320  | 0.00334  | 0.00299 |
| 8034  | 1888.27 | 124.2 | 3.51 | -0.23 | -0.0037 | 0.0469 | 34.48 | 1.668 | 6.983  | 3.1399 | -0.00010 | 0.04183 | -0.02520 | -0.00003 | 0.01332 | -0.00802 | 0.00290  | 0.00335  | 0.00298 |
| 8035  | 1887.84 | 124.2 | 3.51 | -0.23 | -0.0037 | 0.0441 | 34.61 | 1.668 | 7.106  | 3.1383 | 0.00041  | 0.04385 | -0.02332 | 0.00013  | 0.01397 | -0.00743 | 0.00307  | 0.00400  | 0.00357 |
| 8036  | 1888.27 | 124.0 | 3.51 | -0.24 | -0.0067 | 0.0461 | 34.74 | 1.667 | 7.245  | 3.1392 | 0.00045  | 0.04015 | -0.02588 | 0.00014  | 0.01279 | -0.00824 | 0.00308  | 0.00282  | 0.00276 |
| 8037  | 1888.13 | 123.9 | 3.51 | -0.22 | -0.0047 | 0.0463 | 34.86 | 1.669 | 7.351  | 3.1386 | 0.00139  | 0.04201 | -0.02436 | 0.00044  | 0.01339 | -0.00776 | 0.00338  | 0.00341  | 0.00324 |
| 8038  | 1888.42 | 124.0 | 3.51 | -0.22 | -0.0047 | 0.0454 | 34.98 | 1.668 | 7.476  | 3.1395 | -0.00006 | 0.04162 | -0.02411 | -0.00002 | 0.01326 | -0.00768 | 0.00292  | 0.00329  | 0.00332 |
| 8039  | 1887.84 | 124.1 | 3.51 | -0.24 | -0.0050 | 0.0471 | 35.11 | 1.668 | 7.612  | 3.1393 | -0.00025 | 0.04096 | -0.02354 | -0.00008 | 0.01305 | -0.00750 | 0.00286  | 0.00308  | 0.00350 |
| 8040  | 1887.84 | 124.3 | 3.51 | -0.24 | -0.0050 | 0.0452 | 35.23 | 1.667 | 7.742  | 3.1388 | -0.00002 | 0.04047 | -0.02310 | 0.00000  | 0.01289 | -0.00736 | 0.00293  | 0.00292  | 0.00364 |
| 8041  | 1887.84 | 124.3 | 3.51 | -0.25 | -0.0088 | 0.0478 | 35.36 | 1.667 | 7.875  | 3.1394 | -0.00166 | 0.03771 | -0.02403 | -0.00053 | 0.01201 | -0.00765 | 0.00241  | 0.00204  | 0.00335 |
| 8042  | 1887.98 | 124.3 | 3.51 | -0.25 | -0.0043 | 0.0437 | 35.48 | 1.667 | 7.994  | 3.1392 | 0.00159  | 0.03843 | -0.02436 | 0.00051  | 0.01224 | -0.00776 | 0.00344  | 0.00227  | 0.00324 |
| 8043  | 1887.70 | 124.4 | 3.50 | -0.25 | -0.0067 | 0.0434 | 35.61 | 1.667 | 8.121  | 3.1385 | -0.00249 | 0.03285 | -0.02370 | -0.00079 | 0.01047 | -0.00755 | 0.00214  | 0.00050  | 0.00345 |
| 8044  | 1887.98 | 124.3 | 3.51 | -0.24 | -0.0040 | 0.0421 | 35.74 | 1.668 | 8.238  | 3.1388 | -0.00249 | 0.03383 | -0.02449 | -0.00079 | 0.01078 | -0.00780 | 0.00214  | 0.00081  | 0.00320 |
| 8045  | 1887.98 | 124.3 | 3.51 | -0.25 | -0.0064 | 0.0426 | 35.86 | 1.667 | 8.373  | 3.1396 | -0.00658 | 0.02894 | -0.02598 | -0.00210 | 0.00922 | -0.00828 | 0.00084  | -0.00075 | 0.00273 |
| 8046  | 1888.27 | 124.1 | 3.51 | -0.25 | -0.0061 | 0.0437 | 35.98 | 1.667 | 8.498  | 3.1390 | -0.00811 | 0.03002 | -0.02337 | -0.00258 | 0.00957 | -0.00744 | 0.00035  | -0.00041 | 0.00356 |
| 8047  | 1888.42 | 124.2 | 3.51 | -0.24 | -0.0047 | 0.0407 | 36.11 | 1.667 | 8.617  | 3.1399 | -0.01042 | 0.02638 | -0.02431 | -0.00332 | 0.00840 | -0.00774 | -0.00038 | -0.00157 | 0.00326 |
| 8048  | 1887.41 | 124.3 | 3.51 | -0.24 | -0.0061 | 0.0465 | 36.23 | 1.668 | 8.741  | 3.1386 | -0.01236 | 0.02479 | -0.02573 | -0.00394 | 0.00790 | -0.00820 | -0.00100 | -0.00207 | 0.00280 |
| 8049  | 1887.70 | 124.2 | 3.51 | -0.24 | -0.0071 | 0.0497 | 36.36 | 1.667 | 8.868  | 3.1382 | -0.01393 | 0.02338 | -0.02444 | -0.00444 | 0.00745 | -0.00779 | -0.00150 | -0.00252 | 0.00321 |
| 8050  | 1887.98 | 124.1 | 3.51 | -0.23 | -0.0071 | 0.0469 | 36.48 | 1.668 | 8.986  | 3.1386 | -0.01654 | 0.02011 | -0.02517 | -0.00527 | 0.00641 | -0.00802 | -0.00234 | -0.00356 | 0.00298 |
| 8051  | 1887.98 | 124.2 | 3.51 | -0.24 | -0.0078 | 0.0484 | 36.61 | 1.667 | 9.122  | 3.1394 | -0.01806 | 0.01422 | -0.02854 | -0.00575 | 0.00453 | -0.00909 | -0.00282 | -0.00544 | 0.00191 |
| 8052  | 1887.84 | 124.2 | 3.51 | -0.25 | -0.0068 | 0.0517 | 36.73 | 1.667 | 9.252  | 3.1392 | -0.02116 | 0.01015 | -0.02760 | -0.00674 | 0.00323 | -0.00879 | -0.00381 | -0.00674 | 0.00221 |
| 8053  | 1888.13 | 124.1 | 3.51 | -0.24 | -0.0057 | 0.0504 | 36.86 | 1.668 | 9.366  | 3.1395 | -0.02509 | 0.00472 | -0.03295 | -0.00799 | 0.00150 | -0.01050 | -0.00506 | -0.00847 | 0.00051 |
| 8054  | 1888.13 | 124.2 | 3.51 | -0.26 | -0.0098 | 0.0510 | 36.99 | 1.666 | 9.511  | 3.1391 | -0.02881 | 0       |          |          |         |          |          |          |         |

Table A6. Concluded.

Run = 136

M = 1.60

xsppos = 42.346

| point | p0      | t0    | rnft | alpha | cnmrc   | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|---------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 8074  | 1887.84 | 124.3 | 3.51 | -0.25 | -0.0019 | 0.0413 | 39.48 | 1.668 | 11.992 | 3.1387 | -0.00917 | 0.03351 | -0.05270 | -0.00292 | 0.01068 | -0.01679 | 0.00001  | 0.00071  | -0.00579 |
| 8075  | 1887.98 | 124.1 | 3.51 | -0.24 | -0.0019 | 0.0413 | 39.48 | 1.668 | 11.987 | 3.1395 | -0.00920 | 0.03241 | -0.05471 | -0.00293 | 0.01032 | -0.01743 | 0.00000  | 0.00035  | -0.00642 |
| 8076  | 1888.13 | 124.0 | 3.51 | -0.25 | -0.0030 | 0.0445 | 39.61 | 1.667 | 12.120 | 3.1386 | -0.00725 | 0.03510 | -0.04751 | -0.00231 | 0.01118 | -0.01514 | 0.00063  | 0.00121  | -0.00413 |
| 8077  | 1887.84 | 124.1 | 3.51 | -0.25 | -0.0030 | 0.0408 | 39.73 | 1.667 | 12.248 | 3.1387 | -0.00838 | 0.03445 | -0.04513 | -0.00267 | 0.01098 | -0.01438 | 0.00027  | 0.00101  | -0.00338 |
| 8078  | 1887.70 | 124.1 | 3.51 | -0.24 | -0.0023 | 0.0421 | 39.86 | 1.668 | 12.365 | 3.1396 | -0.00918 | 0.03258 | -0.04299 | -0.00292 | 0.01038 | -0.01369 | 0.00001  | 0.00041  | -0.00269 |
| 8079  | 1888.13 | 124.3 | 3.51 | -0.24 | 0.0001  | 0.0397 | 39.98 | 1.668 | 12.485 | 3.1393 | -0.00799 | 0.03239 | -0.03832 | -0.00255 | 0.01032 | -0.01221 | 0.00039  | 0.00035  | -0.00121 |
| 8080  | 1887.84 | 124.3 | 3.51 | -0.25 | -0.0013 | 0.0408 | 40.11 | 1.668 | 12.619 | 3.1381 | -0.00597 | 0.03116 | -0.03826 | -0.00190 | 0.00993 | -0.01219 | 0.00103  | -0.00004 | -0.00119 |
| 8081  | 1887.98 | 124.2 | 3.51 | -0.25 | -0.0009 | 0.0410 | 40.23 | 1.667 | 12.747 | 3.1384 | -0.00645 | 0.03090 | -0.03835 | -0.00206 | 0.00985 | -0.01222 | 0.00088  | -0.00012 | -0.00122 |
| 8082  | 1887.84 | 124.1 | 3.51 | -0.26 | -0.0002 | 0.0423 | 40.36 | 1.667 | 12.872 | 3.1389 | -0.00731 | 0.02946 | -0.03991 | -0.00233 | 0.00939 | -0.01271 | 0.00061  | -0.00058 | -0.00171 |
| 8083  | 1888.27 | 124.0 | 3.51 | -0.25 | -0.0030 | 0.0464 | 40.48 | 1.667 | 12.993 | 3.1401 | -0.00931 | 0.02721 | -0.03845 | -0.00296 | 0.00866 | -0.01224 | -0.00003 | -0.00131 | -0.00124 |
| 8084  | 1887.70 | 124.0 | 3.51 | -0.25 | -0.0026 | 0.0438 | 40.61 | 1.667 | 13.122 | 3.1382 | -0.01089 | 0.02665 | -0.03734 | -0.00347 | 0.00849 | -0.01190 | -0.00053 | -0.00148 | -0.00090 |
| 8085  | 1887.98 | 124.1 | 3.51 | -0.25 | -0.0037 | 0.0497 | 40.73 | 1.667 | 13.248 | 3.1394 | -0.01284 | 0.02386 | -0.03808 | -0.00409 | 0.00760 | -0.01213 | -0.00116 | -0.00237 | -0.00113 |
| 8086  | 1888.56 | 124.3 | 3.51 | -0.25 | -0.0019 | 0.0460 | 40.86 | 1.667 | 13.371 | 3.1395 | -0.01473 | 0.02259 | -0.03726 | -0.00469 | 0.00720 | -0.01187 | -0.00176 | -0.00278 | -0.00087 |
| 8087  | 1887.41 | 124.1 | 3.51 | -0.25 | -0.0002 | 0.0497 | 40.99 | 1.667 | 13.494 | 3.1377 | -0.01319 | 0.02191 | -0.03790 | -0.00421 | 0.00698 | -0.01208 | -0.00127 | -0.00299 | -0.00108 |
| 8088  | 1887.98 | 124.1 | 3.51 | -0.25 | -0.0013 | 0.0501 | 41.11 | 1.667 | 13.620 | 3.1386 | -0.01661 | 0.02353 | -0.03816 | -0.00529 | 0.00750 | -0.01216 | -0.00236 | -0.00247 | -0.00116 |
| 8089  | 1887.55 | 124.3 | 3.50 | -0.26 | -0.0033 | 0.0508 | 41.23 | 1.667 | 13.754 | 3.1385 | -0.01738 | 0.02586 | -0.03673 | -0.00554 | 0.00824 | -0.01170 | -0.00260 | -0.00173 | -0.00070 |
| 8090  | 1887.98 | 124.2 | 3.51 | -0.25 | -0.0037 | 0.0525 | 41.36 | 1.667 | 13.874 | 3.1388 | -0.01407 | 0.02972 | -0.03682 | -0.00448 | 0.00947 | -0.01173 | -0.00155 | -0.00050 | -0.00073 |
| 8091  | 1888.27 | 124.2 | 3.51 | -0.26 | -0.0033 | 0.0490 | 41.48 | 1.667 | 14.005 | 3.1395 | -0.01224 | 0.03164 | -0.03643 | -0.00390 | 0.01008 | -0.01160 | -0.00096 | 0.00011  | -0.00060 |
| 8092  | 1888.13 | 124.2 | 3.51 | -0.25 | -0.0001 | 0.0481 | 41.61 | 1.667 | 14.121 | 3.1397 | -0.00795 | 0.03165 | -0.03724 | -0.00253 | 0.01008 | -0.01186 | 0.00040  | 0.00011  | -0.00086 |
| 8093  | 1888.27 | 124.1 | 3.51 | -0.24 | -0.0006 | 0.0467 | 41.73 | 1.668 | 14.238 | 3.1391 | -0.00620 | 0.03120 | -0.03702 | -0.00197 | 0.00994 | -0.01179 | 0.00096  | -0.00003 | -0.00079 |
| 8094  | 1887.84 | 124.1 | 3.51 | -0.24 | 0.0001  | 0.0425 | 41.86 | 1.668 | 14.358 | 3.1391 | -0.00899 | 0.02640 | -0.04084 | -0.00286 | 0.00841 | -0.01301 | 0.00007  | -0.00156 | -0.00201 |
| 8095  | 1887.84 | 124.1 | 3.51 | -0.24 | -0.0020 | 0.0488 | 41.98 | 1.668 | 14.492 | 3.1389 | -0.01167 | 0.02503 | -0.04092 | -0.00372 | 0.00797 | -0.01304 | -0.00078 | -0.00200 | -0.00203 |
| 8096  | 1887.98 | 124.1 | 3.51 | -0.25 | 0.0008  | 0.0466 | 42.11 | 1.667 | 14.620 | 3.1388 | -0.01233 | 0.02321 | -0.04314 | -0.00393 | 0.00739 | -0.01375 | -0.00099 | -0.00258 | -0.00274 |
| 8097  | 1888.13 | 124.2 | 3.51 | -0.25 | -0.0030 | 0.0454 | 42.23 | 1.667 | 14.749 | 3.1398 | -0.01469 | 0.02489 | -0.04280 | -0.00468 | 0.00793 | -0.01363 | -0.00174 | -0.00204 | -0.00263 |
| 8098  | 1888.13 | 123.9 | 3.51 | -0.25 | 0.0001  | 0.0453 | 42.23 | 1.668 | 14.740 | 3.1398 | -0.01715 | 0.02479 | -0.04369 | -0.00546 | 0.00790 | -0.01392 | -0.00253 | -0.00207 | -0.00291 |
| 8099  | 1887.70 | 124.0 | 3.51 | -0.25 | -0.0030 | 0.0464 | 42.36 | 1.667 | 14.875 | 3.1388 | -0.01630 | 0.02839 | -0.03966 | -0.00519 | 0.00904 | -0.01264 | -0.00226 | -0.00093 | -0.00163 |
| 8100  | 1887.98 | 124.1 | 3.51 | -0.25 | -0.0016 | 0.0443 | 42.49 | 1.667 | 15.000 | 3.1399 | -0.01308 | 0.03331 | -0.04030 | -0.00417 | 0.01061 | -0.01283 | -0.00123 | 0.00064  | -0.00183 |
| 8101  | 1887.98 | 124.2 | 3.51 | -0.24 | 0.0022  | 0.0389 | 42.61 | 1.668 | 15.110 | 3.1391 | -0.00926 | 0.03451 | -0.03573 | -0.00295 | 0.01099 | -0.01138 | -0.00002 | 0.00102  | -0.00038 |
| 8102  | 1887.70 | 124.3 | 3.51 | -0.25 | -0.0040 | 0.0458 | 42.74 | 1.667 | 15.252 | 3.1385 | -0.00657 | 0.03621 | -0.03244 | -0.00209 | 0.01154 | -0.01033 | 0.00084  | 0.00157  | 0.00067  |
| 8103  | 1888.27 | 124.1 | 3.51 | -0.25 | -0.0033 | 0.0462 | 42.86 | 1.667 | 15.368 | 3.1399 | -0.00570 | 0.03514 | -0.03319 | -0.00181 | 0.01119 | -0.01057 | 0.00112  | 0.00122  | 0.00043  |
| 8104  | 1888.13 | 124.2 | 3.51 | -0.26 | -0.0030 | 0.0454 | 42.98 | 1.667 | 15.507 | 3.1401 | -0.00486 | 0.03496 | -0.03469 | -0.00155 | 0.01113 | -0.01105 | 0.00139  | 0.00116  | -0.00004 |
| 8105  | 1887.84 | 124.0 | 3.51 | -0.25 | 0.0001  | 0.0443 | 43.11 | 1.667 | 15.617 | 3.1389 | -0.00569 | 0.03576 | -0.03694 | -0.00181 | 0.01139 | -0.01177 | 0.00112  | 0.00142  | -0.00077 |
| 8106  | 1887.98 | 124.1 | 3.51 | -0.26 | -0.0023 | 0.0458 | 43.24 | 1.667 | 15.754 | 3.1390 | -0.00766 | 0.03323 | -0.04027 | -0.00244 | 0.01059 | -0.01283 | 0.00049  | 0.00062  | -0.00183 |
| 8107  | 1887.98 | 124.1 | 3.51 | -0.25 | -0.0016 | 0.0434 | 43.36 | 1.667 | 15.871 | 3.1393 | -0.00744 | 0.03251 | -0.04012 | -0.00237 | 0.01036 | -0.01278 | 0.00056  | 0.00038  | -0.00178 |
| 8108  | 1887.98 | 124.3 | 3.51 | -0.26 | -0.0040 | 0.0449 | 43.48 | 1.667 | 16.009 | 3.1398 | -0.00743 | 0.03189 | -0.04007 | -0.00237 | 0.01016 | -0.01276 | 0.00057  | 0.00019  | -0.00176 |
| 8109  | 1888.13 | 124.1 | 3.51 | -0.25 | -0.0019 | 0.0451 | 43.61 | 1.667 | 16.121 | 3.1390 | -0.00664 | 0.03144 | -0.03590 | -0.00212 | 0.01002 | -0.01144 | 0.00082  | 0.00005  | -0.00044 |
| 8110  | 1888.27 | 124.2 | 3.51 | -0.25 | -0.0013 | 0.0464 | 43.73 | 1.667 | 16.245 | 3.1395 | -0.00902 | 0.03157 | -0.03235 | -0.00287 | 0.01006 | -0.01031 | 0.00006  | 0.00009  | 0.00070  |
| 8111  | 1887.98 | 124.3 | 3.51 | -0.26 | 0.0001  | 0.0397 | 43.86 | 1.667 | 16.372 | 3.1380 | -0.00758 | 0.03234 | -0.02892 | -0.00242 | 0.01031 | -0.00922 | 0.00052  | 0.00033  | 0.00178  |
| 8112  | 1887.84 | 124.2 | 3.51 | -0.26 | -0.0026 | 0.0438 | 43.99 | 1.667 | 16.504 | 3.1395 | -0.00996 | 0.03104 | -0.03127 | -0.00317 | 0.00989 | -0.00996 | -0.00024 | -0.00008 | 0.00104  |
| 8113  | 1887.55 | 124.2 | 3.51 | -0.26 | -0.0009 | 0.0410 | 44.11 | 1.667 | 16.625 | 3.1389 | -0.00869 | 0.03107 | -0.03068 | -0.00277 | 0.00990 | -0.00978 | 0.00017  | -0.00007 | 0.00123  |
| 8114  | 1887.98 | 124.0 | 3.51 | -0.26 | -0.0013 | 0.0482 | 44.23 | 1.667 | 16.748 | 3.1393 | -0.00884 | 0.03226 | -0.02995 | -0.00282 | 0.01028 | -0.00954 | 0.00012  | 0.00030  | 0.00146  |
| 8115  | 1887.84 | 124.2 | 3.51 | -0.26 | -0.0026 | 0.0465 | 44.36 | 1.667 | 16.879 | 3.1383 | -0.00819 | 0.03435 | -0.02956 | -0.00261 | 0.01095 | -0.00942 | 0.00032  | 0.00098  | 0.00158  |
| 8116  | 1887.98 | 124.4 | 3.51 | -0.25 | -0.0023 | 0.0458 | 44.48 | 1.667 | 17.000 | 3.1394 | -0.00792 | 0.03340 | -0.03252 | -0.00252 | 0.01064 | -0.01036 | 0.00041  | 0.00067  | 0.00064  |
| 8117  | 1888.13 | 124.1 | 3.51 | -0.27 | -0.0030 | 0.0501 | 44.61 | 1.667 | 17.135 | 3.1388 | -0.00785 | 0.03295 | -0.03093 | -0.00250 | 0.01050 | -0.00985 | 0.00043  | 0.00053  | 0.00115  |
| 8118  | 1887.98 | 124.2 | 3.51 | -0.25 | 0.0001  | 0.0434 | 44.73 | 1.667 | 17.246 | 3.1384 | -0.00754 | 0.03255 | -0.03153 | -0.00240 | 0.01037 | -0.01005 | 0.00053  | 0.00040  | 0.00096  |
| 8119  | 1888.42 | 124.2 | 3.51 | -0.25 | 0.0001  | 0.0434 | 44.86 | 1.668 | 17.369 | 3.1399 | -0.00999 | 0.03344 | -0.03294 | -0.00318 | 0.01065 | -0.01049 | -0.00025 | 0.00068  | 0.00051  |
| 8120  | 1888.27 | 124.1 | 3.51 | -0.27 | -0.0033 | 0.0452 | 44.86 | 1.667 | 17.384 | 3.1387 | -0.00793 | 0.03266 | -0.03321 | -0.00253 | 0.01040 | -0.01058 | 0.00041  | 0.00043  | 0.00042  |
| 8121  | 1888.13 | 124.3 | 3.51 | -0.26 | -0.0002 | 0.0423 | 44.99 | 1.667 | 17.502 | 3.1388 | -0.00938 | 0.03399 | -0.03226 | -0.00299 | 0.01083 | -0.01028 | -0.00005 | 0.00086  | 0.00072  |
| 8122  | 1887.84 | 124.4 | 3.50 | -0.27 | -0.0057 | 0.0495 | 45.11 | 1.666 | 17.642 | 3.1392 | -0.00833 | 0.03155 | -0.03310 | -0.00265 | 0.01005 | -0.01054 | 0.00028  | 0.00008  | 0.00046  |
| 8123  | 1888.27 | 124.1 | 3.51 | -0.26 | -0.0013 | 0.0445 | 45.24 | 1.667 | 17.755 | 3.1396 | -0.00909 | 0.03153 | -0.03343 | -0.00290 | 0.01004 | -0.01065 | 0.00004  | 0.00007  | 0.00035  |
| 8124  | 1887.84 | 124.0 | 3.51 | -0.27 | -0.0047 | 0.0454 | 45.36 | 1.666 | 17.889 | 3.1394 | -0.00948 | 0.03312 | -0.03339 | -0.00302 | 0.01055 | -0.01064 | -0.00008 | 0.00058  | 0.00037  |
| 8125  | 1888.27 | 124.1 | 3.51 | -0.25 | -0.0006 | 0.0439 | 45.48 | 1.667 | 17.995 | 3.1389 | -0.00906 | 0.03368 | -0.03299 | -0.00289 | 0.01073 | -0.01051 | 0.00005  | 0.00076  | 0.00049  |
| 8126  | 1887.55 | 124.1 | 3.51 | -0.26 | -0.0026 | 0.0447 | 45.61 | 1.667 | 18.130 | 3.1387 | -0.00817 | 0.03275 | -0.03284 | -0.00260 | 0.01044 | -0.01046 | 0.00033  | 0.00046  | 0.00054  |
| 8127  | 1887.84 | 124.1 | 3.51 | -0.26 | -0.0026 | 0.0493 |       |       |        |        |          |         |          |          |         |          |          |          |          |



Table A7. Run 137.

Run = 137

M = 1.60

xsppos = 42.346

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 8128  | 1888.27 | 124.1 | 3.51 | 0.25  | 0.0207 | 0.0352 | 21.36 | 1.688 | -6.473 | 3.1386 | -0.00898 | 0.03185 | -0.03409 | -0.00286 | 0.01015 | -0.01086 | -0.00001 | 0.00006  | 0.00004  |
| 8129  | 1888.13 | 123.9 | 3.51 | 0.25  | 0.0234 | 0.0320 | 21.48 | 1.688 | -6.352 | 3.1386 | -0.00749 | 0.03203 | -0.03391 | -0.00239 | 0.01021 | -0.01080 | 0.00046  | 0.00011  | 0.00010  |
| 8130  | 1887.84 | 124.1 | 3.51 | 0.25  | 0.0217 | 0.0311 | 21.61 | 1.688 | -6.224 | 3.1391 | -0.00998 | 0.03060 | -0.03541 | -0.00318 | 0.00975 | -0.01128 | -0.00033 | -0.00034 | -0.00038 |
| 8131  | 1888.13 | 124.2 | 3.51 | 0.26  | 0.0255 | 0.0238 | 21.73 | 1.689 | -6.115 | 3.1390 | -0.00909 | 0.03153 | -0.03457 | -0.00290 | 0.01004 | -0.01101 | -0.00005 | -0.00005 | -0.00012 |
| 8132  | 1888.13 | 124.2 | 3.51 | 0.24  | 0.0217 | 0.0283 | 21.86 | 1.688 | -5.965 | 3.1384 | -0.00914 | 0.03236 | -0.03305 | -0.00291 | 0.01031 | -0.01053 | -0.00007 | 0.00022  | 0.00037  |
| 8133  | 1888.13 | 124.1 | 3.51 | 0.24  | 0.0245 | 0.0289 | 21.98 | 1.688 | -5.844 | 3.1388 | -0.00830 | 0.03198 | -0.03413 | -0.00264 | 0.01019 | -0.01087 | 0.00020  | 0.00010  | 0.00003  |
| 8134  | 1888.13 | 124.1 | 3.51 | 0.24  | 0.0224 | 0.0249 | 22.11 | 1.688 | -5.714 | 3.1391 | -0.00787 | 0.03175 | -0.03453 | -0.00251 | 0.01011 | -0.01100 | 0.00034  | 0.00002  | -0.00010 |
| 8135  | 1888.42 | 124.0 | 3.51 | 0.25  | 0.0248 | 0.0244 | 22.24 | 1.688 | -5.599 | 3.1396 | -0.00950 | 0.03123 | -0.03335 | -0.00303 | 0.00995 | -0.01062 | -0.00018 | -0.00015 | 0.00028  |
| 8136  | 1888.27 | 124.1 | 3.51 | 0.24  | 0.0259 | 0.0194 | 22.36 | 1.688 | -5.474 | 3.1390 | -0.00960 | 0.03194 | -0.03321 | -0.00306 | 0.01018 | -0.01058 | -0.00021 | 0.00008  | 0.00032  |
| 8137  | 1888.27 | 124.1 | 3.51 | 0.24  | 0.0224 | 0.0231 | 22.48 | 1.688 | -5.344 | 3.1393 | -0.01059 | 0.03132 | -0.03474 | -0.00337 | 0.00998 | -0.01106 | -0.00052 | -0.00011 | -0.00017 |
| 8138  | 1887.98 | 124.0 | 3.51 | 0.24  | 0.0224 | 0.0249 | 22.61 | 1.688 | -5.217 | 3.1378 | -0.00739 | 0.03321 | -0.03329 | -0.00235 | 0.01058 | -0.01061 | 0.00049  | 0.00049  | 0.00029  |
| 8139  | 1887.70 | 124.2 | 3.51 | 0.25  | 0.0242 | 0.0231 | 22.74 | 1.688 | -5.098 | 3.1386 | -0.00890 | 0.03102 | -0.03362 | -0.00283 | 0.00988 | -0.01071 | 0.00001  | -0.00021 | 0.00019  |
| 8140  | 1888.42 | 124.2 | 3.51 | 0.24  | 0.0228 | 0.0270 | 22.86 | 1.688 | -4.969 | 3.1404 | -0.01108 | 0.03068 | -0.03580 | -0.00353 | 0.00977 | -0.01140 | -0.00068 | -0.00032 | -0.00050 |
| 8141  | 1888.13 | 124.0 | 3.51 | 0.26  | 0.0259 | 0.0231 | 22.98 | 1.689 | -4.862 | 3.1395 | -0.00969 | 0.03103 | -0.03494 | -0.00309 | 0.00988 | -0.01113 | -0.00024 | -0.00021 | -0.00023 |
| 8142  | 1888.13 | 124.1 | 3.51 | 0.25  | 0.0238 | 0.0294 | 23.11 | 1.689 | -4.732 | 3.1392 | -0.00972 | 0.03116 | -0.03455 | -0.00310 | 0.00993 | -0.01100 | -0.00025 | -0.00017 | -0.00011 |
| 8143  | 1888.13 | 124.1 | 3.51 | 0.24  | 0.0235 | 0.0283 | 23.23 | 1.688 | -4.597 | 3.1388 | -0.00972 | 0.03151 | -0.03479 | -0.00310 | 0.01004 | -0.01108 | -0.00025 | -0.00005 | -0.00018 |
| 8144  | 1888.27 | 124.1 | 3.51 | 0.24  | 0.0241 | 0.0287 | 23.36 | 1.688 | -4.473 | 3.1395 | -0.00947 | 0.03254 | -0.03547 | -0.00302 | 0.01036 | -0.01130 | -0.00017 | 0.00027  | -0.00040 |
| 8145  | 1888.13 | 124.1 | 3.51 | 0.24  | 0.0245 | 0.0233 | 23.49 | 1.688 | -4.343 | 3.1399 | -0.00855 | 0.03234 | -0.03570 | -0.00272 | 0.01030 | -0.01137 | 0.00012  | 0.00021  | -0.00047 |
| 8146  | 1887.84 | 124.2 | 3.51 | 0.25  | 0.0259 | 0.0203 | 23.61 | 1.689 | -4.238 | 3.1399 | -0.00804 | 0.03059 | -0.03709 | -0.00256 | 0.00974 | -0.01181 | 0.00029  | -0.00035 | -0.00091 |
| 8147  | 1888.13 | 124.0 | 3.51 | 0.25  | 0.0245 | 0.0223 | 23.73 | 1.688 | -4.100 | 3.1394 | -0.00960 | 0.03170 | -0.03509 | -0.00306 | 0.01010 | -0.01118 | -0.00021 | 0.00001  | -0.00028 |
| 8148  | 1887.84 | 124.0 | 3.51 | 0.25  | 0.0235 | 0.0274 | 23.86 | 1.688 | -3.976 | 3.1392 | -0.00964 | 0.03100 | -0.03541 | -0.00307 | 0.00988 | -0.01128 | -0.00022 | -0.00022 | -0.00038 |
| 8149  | 1887.70 | 123.9 | 3.51 | 0.24  | 0.0235 | 0.0227 | 23.99 | 1.688 | -3.847 | 3.1393 | -0.00966 | 0.03114 | -0.03536 | -0.00308 | 0.00992 | -0.01126 | -0.00023 | -0.00017 | -0.00037 |
| 8150  | 1887.70 | 124.0 | 3.51 | 0.26  | 0.0255 | 0.0229 | 24.11 | 1.689 | -3.733 | 3.1390 | -0.01002 | 0.03168 | -0.03546 | -0.00319 | 0.01009 | -0.01130 | -0.00034 | 0.00000  | -0.00040 |
| 8151  | 1887.98 | 124.0 | 3.51 | 0.24  | 0.0217 | 0.0264 | 24.23 | 1.688 | -3.594 | 3.1394 | -0.00921 | 0.03059 | -0.03578 | -0.00293 | 0.00974 | -0.01140 | -0.00009 | -0.00035 | -0.00050 |
| 8152  | 1888.42 | 124.0 | 3.51 | 0.25  | 0.0231 | 0.0318 | 24.36 | 1.688 | -3.473 | 3.1385 | -0.00838 | 0.03239 | -0.03264 | -0.00267 | 0.01032 | -0.01040 | 0.00018  | 0.00023  | 0.00050  |
| 8153  | 1887.84 | 124.1 | 3.51 | 0.25  | 0.0245 | 0.0326 | 24.49 | 1.689 | -3.353 | 3.1396 | -0.00991 | 0.03143 | -0.03693 | -0.00316 | 0.01001 | -0.01176 | -0.00031 | -0.00008 | -0.00086 |
| 8154  | 1887.41 | 124.2 | 3.51 | 0.24  | 0.0200 | 0.0395 | 24.61 | 1.688 | -3.219 | 3.1385 | -0.00757 | 0.03510 | -0.03502 | -0.00241 | 0.01118 | -0.01116 | 0.00044  | 0.01009  | -0.00026 |
| 8155  | 1887.98 | 124.3 | 3.51 | 0.24  | 0.0180 | 0.0355 | 24.74 | 1.688 | -3.083 | 3.1400 | -0.00857 | 0.03296 | -0.03406 | -0.00273 | 0.01050 | -0.01085 | 0.00012  | 0.00041  | 0.00005  |
| 8156  | 1887.98 | 124.1 | 3.51 | 0.24  | 0.0204 | 0.0350 | 24.86 | 1.688 | -2.967 | 3.1399 | -0.00782 | 0.03369 | -0.03538 | -0.00249 | 0.01073 | -0.01127 | 0.00036  | 0.00064  | -0.00037 |
| 8157  | 1888.13 | 124.0 | 3.51 | 0.26  | 0.0238 | 0.0294 | 24.99 | 1.689 | -2.856 | 3.1403 | -0.00641 | 0.03043 | -0.03531 | -0.00204 | 0.00969 | -0.01124 | 0.00081  | -0.00040 | -0.00034 |
| 8158  | 1887.26 | 124.0 | 3.51 | 0.24  | 0.0214 | 0.0290 | 25.11 | 1.688 | -2.714 | 3.1383 | -0.00854 | 0.02947 | -0.03433 | -0.00272 | 0.00939 | -0.01094 | 0.00012  | -0.00070 | -0.00004 |
| 8159  | 1888.27 | 124.1 | 3.51 | 0.24  | 0.0190 | 0.0296 | 25.23 | 1.688 | -2.592 | 3.1388 | -0.01003 | 0.03094 | -0.03369 | -0.00320 | 0.00986 | -0.01073 | -0.00035 | -0.00023 | 0.00017  |
| 8160  | 1887.70 | 124.0 | 3.51 | 0.24  | 0.0204 | 0.0313 | 25.36 | 1.688 | -2.467 | 3.1392 | -0.01146 | 0.03059 | -0.03466 | -0.00365 | 0.00974 | -0.01104 | -0.00080 | -0.00035 | -0.00014 |
| 8161  | 1888.27 | 124.2 | 3.51 | 0.25  | 0.0234 | 0.0329 | 25.49 | 1.688 | -2.348 | 3.1399 | -0.00995 | 0.03351 | -0.03444 | -0.00317 | 0.01067 | -0.01097 | -0.00032 | 0.00058  | -0.00007 |
| 8162  | 1888.13 | 124.0 | 3.51 | 0.25  | 0.0200 | 0.0339 | 25.61 | 1.688 | -2.222 | 3.1397 | -0.00907 | 0.03708 | -0.03389 | -0.00289 | 0.01181 | -0.01079 | -0.00004 | 0.00172  | 0.00011  |
| 8163  | 1888.27 | 124.1 | 3.51 | 0.24  | 0.0200 | 0.0311 | 25.74 | 1.688 | -2.087 | 3.1391 | -0.00682 | 0.04050 | -0.03315 | -0.00217 | 0.01290 | -0.01056 | 0.00068  | 0.00281  | 0.00034  |
| 8164  | 1888.13 | 123.9 | 3.51 | 0.25  | 0.0197 | 0.0346 | 25.86 | 1.688 | -1.972 | 3.1386 | -0.00387 | 0.03927 | -0.03098 | -0.00123 | 0.01251 | -0.00987 | 0.00162  | 0.00242  | 0.00103  |
| 8165  | 1887.98 | 124.0 | 3.51 | 0.23  | 0.0176 | 0.0372 | 25.98 | 1.687 | -1.835 | 3.1391 | -0.00177 | 0.03741 | -0.03094 | -0.00056 | 0.01192 | -0.00986 | 0.00228  | 0.00183  | 0.00104  |
| 8166  | 1888.27 | 124.0 | 3.51 | 0.23  | 0.0173 | 0.0323 | 26.11 | 1.687 | -1.703 | 3.1393 | -0.00300 | 0.03335 | -0.03148 | -0.00096 | 0.01062 | -0.01003 | 0.00189  | 0.00053  | 0.00087  |
| 8167  | 1887.70 | 124.0 | 3.51 | 0.26  | 0.0228 | 0.0270 | 26.23 | 1.689 | -1.605 | 3.1386 | -0.00481 | 0.03086 | -0.03369 | -0.00153 | 0.00983 | -0.01073 | 0.00132  | -0.00026 | 0.00017  |
| 8168  | 1887.98 | 124.0 | 3.51 | 0.24  | 0.0207 | 0.0268 | 26.36 | 1.688 | -1.465 | 3.1387 | -0.00879 | 0.02828 | -0.03455 | -0.00280 | 0.00901 | -0.01101 | 0.00005  | -0.00108 | -0.00011 |
| 8169  | 1887.84 | 124.3 | 3.51 | 0.24  | 0.0211 | 0.0316 | 26.49 | 1.688 | -1.342 | 3.1381 | -0.00820 | 0.02987 | -0.03443 | -0.00261 | 0.00952 | -0.01097 | 0.00023  | -0.00057 | -0.00007 |
| 8170  | 1887.98 | 124.2 | 3.51 | 0.24  | 0.0190 | 0.0296 | 26.61 | 1.688 | -1.212 | 3.1380 | -0.01155 | 0.03265 | -0.03387 | -0.00368 | 0.01040 | -0.01079 | -0.00083 | 0.00031  | 0.00011  |
| 8171  | 1887.84 | 124.3 | 3.51 | 0.24  | 0.0193 | 0.0279 | 26.74 | 1.688 | -1.092 | 3.1402 | -0.01062 | 0.03480 | -0.03260 | -0.00338 | 0.01108 | -0.01038 | -0.00054 | 0.00099  | 0.00052  |
| 8172  | 1887.98 | 124.3 | 3.51 | 0.24  | 0.0217 | 0.0264 | 26.86 | 1.688 | -0.966 | 3.1386 | -0.00772 | 0.04281 | -0.02905 | -0.00246 | 0.01364 | -0.00926 | 0.00039  | 0.00355  | 0.00164  |
| 8173  | 1888.13 | 124.2 | 3.51 | 0.25  | 0.0224 | 0.0277 | 26.98 | 1.689 | -0.855 | 3.1396 | -0.00262 | 0.04232 | -0.02968 | -0.00083 | 0.01348 | -0.00945 | 0.00201  | 0.00339  | 0.00144  |
| 8174  | 1888.42 | 124.2 | 3.51 | 0.24  | 0.0183 | 0.0301 | 27.11 | 1.688 | -0.713 | 3.1399 | -0.00094 | 0.03958 | -0.02774 | -0.00030 | 0.01260 | -0.00884 | 0.00255  | 0.00251  | 0.00206  |
| 8175  | 1887.84 | 124.1 | 3.51 | 0.25  | 0.0214 | 0.0253 | 27.23 | 1.688 | -0.601 | 3.1388 | -0.00100 | 0.03849 | -0.02799 | -0.00032 | 0.01226 | -0.00892 | 0.00253  | 0.00217  | 0.00198  |
| 8176  | 1887.98 | 124.2 | 3.51 | 0.23  | 0.0186 | 0.0322 | 27.36 | 1.687 | -0.459 | 3.1386 | -0.00455 | 0.03321 | -0.03120 | -0.00145 | 0.01058 | -0.00994 | 0.00140  | 0.00049  | 0.00096  |
| 8177  | 1888.13 | 124.2 | 3.51 | 0.25  | 0.0200 | 0.0301 | 27.48 | 1.688 | -0.346 | 3.1395 | -0.00487 | 0.03018 | -0.03483 | -0.00155 | 0.00961 | -0.01109 | 0.00130  | -0.00048 | -0.00019 |
| 8178  | 1888.42 | 124.2 | 3.51 | 0.25  | 0.0204 | 0.0331 | 27.61 | 1.688 | -0.219 | 3.1396 | -0.00779 | 0.02904 | -0.03727 | -0.00248 | 0.00925 | -0.01187 | 0.00037  | -0.00084 | -0.00097 |
| 8179  | 1888.13 | 124.3 | 3.51 | 0.26  | 0.0221 | 0.0275 | 27.73 | 1.689 | -0.106 | 3.1396 | -0.00985 | 0.03109 | -0.03745 | -0.00314 | 0.00990 | -0.01193 | -0.00029 | -0.00019 | -0.00103 |
| 8180  | 1887.55 | 124.2 | 3.51 | 0.26  | 0.0221 | 0.0322 | 27.86 | 1.689 | 0.020  | 3.1384 | -0.01070 | 0.03720 | -0.03325 | -0.00341 | 0.01185 | -0.01059 | -0.00056 | 0.00176  | 0.00030  |
| 8181  | 1887.84 | 124.1 | 3.51 | 0.24  | 0.0210 | 0.0326 | 27.99 | 1.688 | 0.156  | 3.1384 | -0.00756 |         |          |          |         |          |          |          |          |

Table A7. Continued.

Run = 137

M = 1.60

xsppos = 42.347

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c  |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|---------|
| 8201  | 1887.98 | 124.2 | 3.51 | 0.25  | 0.0235 | 0.0255 | 30.48 | 1.689 | 2.643  | 3.1390 | -0.00165 | 0.03959 | -0.02280 | -0.00053 | 0.01261 | -0.00727 | 0.00232  | 0.00252  | 0.00363 |
| 8202  | 1887.98 | 124.2 | 3.51 | 0.26  | 0.0241 | 0.0249 | 30.71 | 1.689 | 2.863  | 3.1389 | -0.00102 | 0.04024 | -0.02358 | -0.00033 | 0.01282 | -0.00751 | 0.00252  | 0.00273  | 0.00339 |
| 8203  | 1888.13 | 124.2 | 3.51 | 0.26  | 0.0241 | 0.0287 | 30.74 | 1.689 | 2.892  | 3.1390 | -0.00111 | 0.04073 | -0.02444 | -0.00035 | 0.01298 | -0.00779 | 0.00249  | 0.00288  | 0.00311 |
| 8204  | 1887.98 | 124.2 | 3.51 | 0.26  | 0.0255 | 0.0266 | 30.86 | 1.689 | 3.014  | 3.1384 | 0.00007  | 0.04208 | -0.02435 | 0.00002  | 0.01341 | -0.00776 | 0.00287  | 0.00332  | 0.00314 |
| 8205  | 1887.98 | 124.2 | 3.51 | 0.26  | 0.0252 | 0.0274 | 30.99 | 1.689 | 3.144  | 3.1391 | -0.00130 | 0.04128 | -0.02436 | -0.00041 | 0.01315 | -0.00776 | 0.00243  | 0.00306  | 0.00314 |
| 8206  | 1887.70 | 124.2 | 3.51 | 0.25  | 0.0224 | 0.0305 | 31.11 | 1.689 | 3.275  | 3.1389 | -0.00137 | 0.04124 | -0.02621 | -0.00044 | 0.01314 | -0.00835 | 0.00241  | 0.00305  | 0.00255 |
| 8207  | 1887.98 | 124.3 | 3.51 | 0.28  | 0.0262 | 0.0298 | 31.24 | 1.690 | 3.375  | 3.1393 | 0.00047  | 0.04238 | -0.02669 | 0.00015  | 0.01350 | -0.00850 | 0.00300  | 0.00341  | 0.00240 |
| 8208  | 1887.84 | 124.2 | 3.51 | 0.28  | 0.0255 | 0.0304 | 31.36 | 1.690 | 3.501  | 3.1386 | 0.00079  | 0.04355 | -0.02552 | 0.00025  | 0.01388 | -0.00813 | 0.00310  | 0.00378  | 0.00277 |
| 8209  | 1887.98 | 124.4 | 3.51 | 0.26  | 0.0245 | 0.0326 | 31.48 | 1.689 | 3.634  | 3.1389 | 0.00233  | 0.04452 | -0.02494 | 0.00074  | 0.01418 | -0.00795 | 0.00359  | 0.00409  | 0.00295 |
| 8210  | 1888.27 | 124.2 | 3.51 | 0.26  | 0.0224 | 0.0361 | 31.61 | 1.689 | 3.772  | 3.1396 | 0.00140  | 0.04387 | -0.02521 | 0.00045  | 0.01397 | -0.00803 | 0.00329  | 0.00388  | 0.00287 |
| 8211  | 1887.70 | 124.2 | 3.51 | 0.27  | 0.0234 | 0.0358 | 31.73 | 1.689 | 3.885  | 3.1371 | 0.00352  | 0.04365 | -0.02336 | 0.00112  | 0.01391 | -0.00745 | 0.00397  | 0.00382  | 0.00345 |
| 8212  | 1887.84 | 124.2 | 3.51 | 0.26  | 0.0231 | 0.0328 | 31.86 | 1.689 | 4.020  | 3.1375 | 0.00271  | 0.04231 | -0.02356 | 0.00086  | 0.01349 | -0.00751 | 0.00371  | 0.00339  | 0.00339 |
| 8213  | 1887.98 | 124.2 | 3.51 | 0.26  | 0.0238 | 0.0303 | 31.99 | 1.689 | 4.144  | 3.1393 | 0.00004  | 0.03879 | -0.02692 | 0.00001  | 0.01236 | -0.00858 | 0.00286  | 0.00227  | 0.00232 |
| 8214  | 1887.98 | 124.2 | 3.51 | 0.27  | 0.0276 | 0.0268 | 32.11 | 1.689 | 4.258  | 3.1383 | 0.00010  | 0.04112 | -0.02436 | 0.00003  | 0.01310 | -0.00776 | 0.00288  | 0.00301  | 0.00314 |
| 8215  | 1888.42 | 124.1 | 3.51 | 0.26  | 0.0279 | 0.0251 | 32.24 | 1.689 | 4.385  | 3.1388 | -0.00027 | 0.04305 | -0.02432 | -0.00009 | 0.01372 | -0.00775 | 0.00276  | 0.00363  | 0.00315 |
| 8216  | 1887.84 | 124.1 | 3.51 | 0.26  | 0.0269 | 0.0283 | 32.36 | 1.689 | 4.515  | 3.1395 | -0.00068 | 0.04427 | -0.02351 | -0.00022 | 0.01410 | -0.00749 | 0.00263  | 0.00401  | 0.00341 |
| 8217  | 1888.13 | 124.1 | 3.51 | 0.26  | 0.0279 | 0.0233 | 32.49 | 1.689 | 4.639  | 3.1392 | 0.00144  | 0.04692 | -0.02357 | 0.00046  | 0.01495 | -0.00751 | 0.00331  | 0.00486  | 0.00339 |
| 8218  | 1887.98 | 124.1 | 3.51 | 0.25  | 0.0279 | 0.0242 | 32.61 | 1.689 | 4.770  | 3.1396 | 0.00346  | 0.04641 | -0.02241 | 0.00110  | 0.01478 | -0.00714 | 0.00395  | 0.00469  | 0.00376 |
| 8219  | 1888.27 | 124.2 | 3.51 | 0.26  | 0.0293 | 0.0203 | 32.73 | 1.689 | 4.884  | 3.1397 | 0.00477  | 0.04643 | -0.02262 | 0.00152  | 0.01462 | -0.00720 | 0.00437  | 0.00453  | 0.00369 |
| 8220  | 1887.98 | 124.2 | 3.51 | 0.25  | 0.0269 | 0.0265 | 32.86 | 1.689 | 5.019  | 3.1392 | 0.00527  | 0.04341 | -0.02396 | 0.00168  | 0.01383 | -0.00763 | 0.00453  | 0.00374  | 0.00327 |
| 8221  | 1887.98 | 124.2 | 3.51 | 0.25  | 0.0283 | 0.0216 | 32.99 | 1.689 | 5.141  | 3.1389 | 0.00477  | 0.04328 | -0.02367 | 0.00152  | 0.01379 | -0.00754 | 0.00437  | 0.00370  | 0.00336 |
| 8222  | 1887.55 | 124.2 | 3.51 | 0.26  | 0.0293 | 0.0213 | 33.11 | 1.689 | 5.263  | 3.1392 | 0.00421  | 0.04389 | -0.02472 | 0.00134  | 0.01398 | -0.00787 | 0.00419  | 0.00389  | 0.00302 |
| 8223  | 1887.98 | 124.1 | 3.51 | 0.25  | 0.0259 | 0.0277 | 33.23 | 1.688 | 5.398  | 3.1389 | 0.00209  | 0.04385 | -0.02399 | 0.00067  | 0.01397 | -0.00764 | 0.00351  | 0.00388  | 0.00326 |
| 8224  | 1887.84 | 123.9 | 3.51 | 0.26  | 0.0276 | 0.0250 | 33.36 | 1.689 | 5.514  | 3.1401 | 0.00253  | 0.04045 | -0.02575 | 0.00081  | 0.01288 | -0.00820 | 0.00365  | 0.00279  | 0.00270 |
| 8225  | 1887.70 | 124.0 | 3.51 | 0.26  | 0.0265 | 0.0272 | 33.48 | 1.689 | 5.637  | 3.1380 | 0.00432  | 0.04117 | -0.02255 | 0.00138  | 0.01312 | -0.00719 | 0.00422  | 0.00303  | 0.00371 |
| 8226  | 1887.84 | 124.1 | 3.51 | 0.24  | 0.0224 | 0.0315 | 33.61 | 1.688 | 5.776  | 3.1386 | 0.00190  | 0.04270 | -0.01951 | 0.00061  | 0.01360 | -0.00622 | 0.00345  | 0.00351  | 0.00468 |
| 8227  | 1887.98 | 124.1 | 3.51 | 0.26  | 0.0231 | 0.0318 | 33.73 | 1.689 | 5.893  | 3.1389 | 0.00032  | 0.04385 | -0.01756 | 0.00010  | 0.01397 | -0.00559 | 0.00295  | 0.00388  | 0.00530 |
| 8228  | 1888.13 | 124.2 | 3.51 | 0.26  | 0.0252 | 0.0302 | 33.86 | 1.689 | 6.017  | 3.1393 | 0.00271  | 0.04643 | -0.01906 | 0.00086  | 0.01479 | -0.00607 | 0.00371  | 0.00470  | 0.00483 |
| 8229  | 1887.84 | 124.3 | 3.51 | 0.24  | 0.0190 | 0.0361 | 33.99 | 1.688 | 6.158  | 3.1389 | 0.00220  | 0.04594 | -0.01940 | 0.00070  | 0.01464 | -0.00618 | 0.00355  | 0.00454  | 0.00472 |
| 8230  | 1887.98 | 124.3 | 3.51 | 0.26  | 0.0272 | 0.0238 | 34.11 | 1.689 | 6.264  | 3.1385 | 0.00616  | 0.04827 | -0.01775 | 0.00196  | 0.01538 | -0.00566 | 0.00481  | 0.00529  | 0.00524 |
| 8231  | 1888.13 | 124.3 | 3.51 | 0.25  | 0.0241 | 0.0268 | 34.24 | 1.689 | 6.397  | 3.1384 | 0.00646  | 0.04825 | -0.01778 | 0.00206  | 0.01537 | -0.00567 | 0.00491  | 0.00528  | 0.00523 |
| 8232  | 1887.98 | 124.1 | 3.51 | 0.24  | 0.0207 | 0.0286 | 34.36 | 1.688 | 6.535  | 3.1385 | 0.00586  | 0.04694 | -0.02090 | 0.00187  | 0.01496 | -0.00666 | 0.00471  | 0.00487  | 0.00424 |
| 8233  | 1887.70 | 124.0 | 3.51 | 0.25  | 0.0241 | 0.0268 | 34.48 | 1.688 | 6.649  | 3.1382 | 0.00800  | 0.04837 | -0.01964 | 0.00255  | 0.01541 | -0.00626 | 0.00540  | 0.00532  | 0.00464 |
| 8234  | 1887.70 | 124.1 | 3.51 | 0.23  | 0.0190 | 0.0324 | 34.61 | 1.687 | 6.795  | 3.1385 | 0.00587  | 0.04836 | -0.02232 | 0.00187  | 0.01541 | -0.00711 | 0.00472  | 0.00532  | 0.00379 |
| 8235  | 1888.13 | 124.1 | 3.51 | 0.23  | 0.0183 | 0.0376 | 34.74 | 1.687 | 6.915  | 3.1387 | 0.00723  | 0.04960 | -0.02164 | 0.00230  | 0.01580 | -0.00689 | 0.00515  | 0.00571  | 0.00400 |
| 8236  | 1888.13 | 124.3 | 3.51 | 0.24  | 0.0207 | 0.0361 | 34.86 | 1.688 | 7.035  | 3.1392 | 0.00757  | 0.04957 | -0.02133 | 0.00241  | 0.01579 | -0.00679 | 0.00526  | 0.00570  | 0.00411 |
| 8237  | 1888.13 | 124.2 | 3.51 | 0.24  | 0.0217 | 0.0292 | 34.98 | 1.688 | 7.157  | 3.1394 | 0.00717  | 0.04939 | -0.02142 | 0.00228  | 0.01573 | -0.00682 | 0.00513  | 0.00564  | 0.00408 |
| 8238  | 1887.70 | 124.2 | 3.51 | 0.24  | 0.0200 | 0.0339 | 35.11 | 1.688 | 7.286  | 3.1387 | 0.00812  | 0.04980 | -0.01927 | 0.00259  | 0.01587 | -0.00614 | 0.00543  | 0.00578  | 0.00476 |
| 8239  | 1888.27 | 124.0 | 3.51 | 0.24  | 0.0197 | 0.0346 | 35.23 | 1.688 | 7.412  | 3.1388 | 0.00901  | 0.05018 | -0.01645 | 0.00287  | 0.01599 | -0.00524 | 0.00572  | 0.00590  | 0.00566 |
| 8240  | 1887.98 | 124.0 | 3.51 | 0.24  | 0.0204 | 0.0313 | 35.36 | 1.688 | 7.534  | 3.1393 | 0.00865  | 0.04765 | -0.01813 | 0.00276  | 0.01518 | -0.00578 | 0.00560  | 0.00509  | 0.00512 |
| 8241  | 1888.13 | 124.0 | 3.51 | 0.23  | 0.0197 | 0.0327 | 35.49 | 1.687 | 7.668  | 3.1390 | 0.00786  | 0.04467 | -0.01729 | 0.00251  | 0.01423 | -0.00551 | 0.00535  | 0.00414  | 0.00539 |
| 8242  | 1888.13 | 123.9 | 3.51 | 0.23  | 0.0197 | 0.0290 | 35.61 | 1.687 | 7.795  | 3.1392 | 0.00651  | 0.04191 | -0.01797 | 0.00207  | 0.01335 | -0.00572 | 0.00492  | 0.00326  | 0.00518 |
| 8243  | 1888.42 | 124.1 | 3.51 | 0.25  | 0.0224 | 0.0249 | 35.74 | 1.688 | 7.905  | 3.1395 | 0.00577  | 0.04038 | -0.01859 | 0.00184  | 0.01286 | -0.00592 | 0.00469  | 0.00277  | 0.00498 |
| 8244  | 1887.98 | 124.2 | 3.51 | 0.23  | 0.0204 | 0.0294 | 35.86 | 1.687 | 8.044  | 3.1394 | 0.00222  | 0.03733 | -0.01668 | 0.00071  | 0.01189 | -0.00531 | 0.00355  | 0.00180  | 0.00559 |
| 8245  | 1888.13 | 124.1 | 3.51 | 0.23  | 0.0186 | 0.0303 | 35.98 | 1.687 | 8.169  | 3.1391 | -0.00075 | 0.03609 | -0.01771 | -0.00024 | 0.01150 | -0.00564 | 0.00261  | 0.00140  | 0.00526 |
| 8246  | 1887.70 | 124.0 | 3.51 | 0.23  | 0.0190 | 0.0268 | 36.11 | 1.687 | 8.295  | 3.1383 | -0.00183 | 0.03444 | -0.01710 | -0.00058 | 0.01097 | -0.00545 | 0.00227  | 0.00088  | 0.00545 |
| 8247  | 1887.98 | 124.1 | 3.51 | 0.23  | 0.0200 | 0.0273 | 36.23 | 1.687 | 8.415  | 3.1397 | -0.00411 | 0.03274 | -0.01771 | -0.00131 | 0.01043 | -0.00564 | 0.00154  | 0.00034  | 0.00526 |
| 8248  | 1888.42 | 124.0 | 3.51 | 0.24  | 0.0193 | 0.0297 | 36.36 | 1.687 | 8.539  | 3.1404 | -0.00537 | 0.02959 | -0.01762 | -0.00171 | 0.00942 | -0.00561 | 0.00114  | -0.00067 | 0.00529 |
| 8249  | 1887.84 | 124.0 | 3.51 | 0.23  | 0.0176 | 0.0316 | 36.48 | 1.687 | 8.672  | 3.1387 | -0.00674 | 0.02762 | -0.01701 | -0.00215 | 0.00880 | -0.00542 | 0.00070  | -0.00129 | 0.00548 |
| 8250  | 1887.84 | 124.1 | 3.51 | 0.25  | 0.0186 | 0.0331 | 36.62 | 1.688 | 8.783  | 3.1376 | -0.00959 | 0.02368 | -0.01861 | -0.00306 | 0.00755 | -0.00593 | -0.00021 | -0.00254 | 0.00497 |
| 8251  | 1887.70 | 124.1 | 3.51 | 0.24  | 0.0204 | 0.0322 | 36.73 | 1.688 | 8.908  | 3.1387 | -0.01223 | 0.01644 | -0.02271 | -0.00390 | 0.00524 | -0.00724 | -0.00105 | -0.00485 | 0.00366 |
| 8252  | 1888.56 | 124.1 | 3.51 | 0.24  | 0.0183 | 0.0357 | 36.86 | 1.688 | 9.033  | 3.1400 | -0.01941 | 0.01099 | -0.02406 | -0.00618 | 0.00350 | -0.00766 | -0.00333 | -0.00659 | 0.00324 |
| 8253  | 1888.56 | 123.9 | 3.51 | 0.25  | 0.0217 | 0.0329 | 36.99 | 1.688 | 9.151  | 3.1396 | -0.02263 | 0.00737 | -0.02515 | -0.00721 | 0.00235 | -0.00801 | -0.00436 | -0.00775 | 0.00289 |
| 8254  | 1887.55 | 124.0 | 3.51 | 0.23  | 0.0176 | 0.0381 | 37.11 | 1.687 | 9.293  | 3.1389 | -0.02601 | 0       |          |          |         |          |          |          |         |

Table A7. Concluded.

Run = 137

M = 1.60

xsppos = 42.348

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 8274  | 1888.27 | 124.0 | 3.51 | 0.26  | 0.0238 | 0.0294 | 39.61 | 1.689 | 11.767 | 3.1389 | -0.01414 | 0.02828 | -0.05860 | -0.00451 | 0.00901 | -0.01867 | -0.00166 | -0.00108 | -0.00777 |
| 8275  | 1887.84 | 124.0 | 3.51 | 0.26  | 0.0255 | 0.0266 | 39.74 | 1.689 | 11.894 | 3.1388 | -0.01257 | 0.03036 | -0.05821 | -0.00401 | 0.00967 | -0.01855 | -0.00116 | -0.00042 | -0.00765 |
| 8276  | 1887.70 | 124.1 | 3.51 | 0.25  | 0.0241 | 0.0249 | 39.86 | 1.689 | 12.021 | 3.1392 | -0.01260 | 0.03159 | -0.05359 | -0.00401 | 0.01006 | -0.01707 | -0.00116 | -0.00003 | -0.00617 |
| 8277  | 1887.98 | 124.1 | 3.51 | 0.26  | 0.0272 | 0.0238 | 39.99 | 1.689 | 12.136 | 3.1377 | -0.00994 | 0.03339 | -0.04859 | -0.00317 | 0.01064 | -0.01549 | -0.00032 | 0.00055  | -0.00459 |
| 8278  | 1887.70 | 124.1 | 3.51 | 0.26  | 0.0252 | 0.0292 | 40.11 | 1.689 | 12.264 | 3.1389 | -0.01176 | 0.03039 | -0.04571 | -0.00375 | 0.00968 | -0.01456 | -0.00090 | -0.00041 | -0.00366 |
| 8279  | 1888.56 | 124.2 | 3.51 | 0.26  | 0.0255 | 0.0248 | 40.23 | 1.689 | 12.391 | 3.1396 | -0.00890 | 0.03008 | -0.04195 | -0.00284 | 0.00958 | -0.01336 | 0.00001  | -0.00051 | -0.00246 |
| 8280  | 1888.27 | 123.9 | 3.51 | 0.25  | 0.0241 | 0.0315 | 40.36 | 1.689 | 12.521 | 3.1398 | -0.00960 | 0.02742 | -0.04212 | -0.00306 | 0.00873 | -0.01342 | -0.00021 | -0.00136 | -0.00252 |
| 8281  | 1888.13 | 123.9 | 3.51 | 0.26  | 0.0259 | 0.0250 | 40.49 | 1.689 | 12.640 | 3.1398 | -0.00874 | 0.02839 | -0.04151 | -0.00279 | 0.00904 | -0.01322 | 0.00006  | -0.00105 | -0.00232 |
| 8282  | 1887.70 | 124.0 | 3.51 | 0.26  | 0.0241 | 0.0287 | 40.61 | 1.689 | 12.768 | 3.1380 | -0.01047 | 0.02685 | -0.03958 | -0.00334 | 0.00856 | -0.01261 | -0.00049 | -0.00154 | -0.00171 |
| 8283  | 1887.84 | 123.9 | 3.51 | 0.25  | 0.0241 | 0.0287 | 40.74 | 1.689 | 12.896 | 3.1393 | -0.01316 | 0.02272 | -0.04256 | -0.00419 | 0.00724 | -0.01356 | -0.00135 | -0.00285 | -0.00266 |
| 8284  | 1888.27 | 123.9 | 3.51 | 0.25  | 0.0210 | 0.0288 | 40.86 | 1.688 | 13.027 | 3.1390 | -0.01378 | 0.02277 | -0.04026 | -0.00439 | 0.00726 | -0.01283 | -0.00154 | -0.00284 | -0.00193 |
| 8285  | 1888.27 | 123.8 | 3.51 | 0.27  | 0.0245 | 0.0307 | 40.98 | 1.689 | 13.133 | 3.1389 | -0.01337 | 0.02351 | -0.03950 | -0.00426 | 0.00749 | -0.01258 | -0.00141 | -0.00260 | -0.00168 |
| 8286  | 1887.98 | 123.9 | 3.51 | 0.24  | 0.0224 | 0.0324 | 41.11 | 1.688 | 13.279 | 3.1390 | -0.01478 | 0.02140 | -0.04059 | -0.00471 | 0.00682 | -0.01293 | -0.00186 | -0.00327 | -0.00203 |
| 8287  | 1888.13 | 123.9 | 3.51 | 0.25  | 0.0245 | 0.0326 | 41.23 | 1.689 | 13.395 | 3.1393 | -0.01612 | 0.02110 | -0.04038 | -0.00514 | 0.00672 | -0.01286 | -0.00229 | -0.00337 | -0.00196 |
| 8288  | 1887.98 | 124.0 | 3.51 | 0.27  | 0.0259 | 0.0296 | 41.36 | 1.690 | 13.509 | 3.1393 | -0.01766 | 0.02140 | -0.04074 | -0.00563 | 0.00682 | -0.01298 | -0.00278 | -0.00328 | -0.00208 |
| 8289  | 1887.70 | 124.1 | 3.51 | 0.24  | 0.0245 | 0.0298 | 41.49 | 1.688 | 13.656 | 3.1392 | -0.01524 | 0.02660 | -0.03978 | -0.00485 | 0.00847 | -0.01267 | -0.00201 | -0.00162 | -0.00177 |
| 8290  | 1887.84 | 124.1 | 3.51 | 0.26  | 0.0238 | 0.0294 | 41.61 | 1.689 | 13.765 | 3.1390 | -0.01374 | 0.02893 | -0.03922 | -0.00438 | 0.00922 | -0.01250 | -0.00153 | -0.00087 | -0.00160 |
| 8291  | 1888.42 | 124.1 | 3.51 | 0.27  | 0.0279 | 0.0261 | 41.74 | 1.690 | 13.883 | 3.1383 | -0.00858 | 0.03221 | -0.03803 | -0.00273 | 0.01026 | -0.01322 | 0.00011  | 0.00017  | -0.00122 |
| 8292  | 1888.13 | 124.2 | 3.51 | 0.24  | 0.0210 | 0.0354 | 41.86 | 1.688 | 14.035 | 3.1392 | -0.00873 | 0.03053 | -0.03919 | -0.00278 | 0.00972 | -0.01248 | 0.00007  | -0.00037 | -0.00158 |
| 8293  | 1887.84 | 124.3 | 3.51 | 0.24  | 0.0235 | 0.0311 | 41.99 | 1.688 | 14.161 | 3.1397 | -0.00896 | 0.02554 | -0.04193 | -0.00285 | 0.00813 | -0.01336 | -0.00001 | -0.00196 | -0.00246 |
| 8294  | 1887.98 | 124.2 | 3.51 | 0.25  | 0.0269 | 0.0255 | 42.11 | 1.689 | 14.269 | 3.1397 | -0.01158 | 0.02402 | -0.04407 | -0.00369 | 0.00765 | -0.01404 | -0.00084 | -0.00244 | -0.00314 |
| 8295  | 1888.13 | 124.3 | 3.51 | 0.25  | 0.0259 | 0.0240 | 42.23 | 1.688 | 14.397 | 3.1401 | -0.01364 | 0.02236 | -0.04496 | -0.00434 | 0.00712 | -0.01432 | -0.00150 | -0.00297 | -0.00342 |
| 8296  | 1887.98 | 124.4 | 3.51 | 0.25  | 0.0235 | 0.0274 | 42.36 | 1.688 | 14.527 | 3.1389 | -0.01540 | 0.02432 | -0.04317 | -0.00491 | 0.00775 | -0.01375 | -0.00206 | -0.00234 | -0.00285 |
| 8297  | 1888.13 | 124.3 | 3.51 | 0.25  | 0.0269 | 0.0246 | 42.49 | 1.689 | 14.647 | 3.1384 | -0.01593 | 0.02772 | -0.04170 | -0.00508 | 0.00883 | -0.01329 | -0.00223 | -0.00126 | -0.00239 |
| 8298  | 1887.70 | 124.3 | 3.51 | 0.25  | 0.0255 | 0.0257 | 42.61 | 1.689 | 14.775 | 3.1382 | -0.01396 | 0.03205 | -0.03871 | -0.00445 | 0.01021 | -0.01234 | -0.00160 | 0.00012  | -0.00144 |
| 8299  | 1887.98 | 124.1 | 3.51 | 0.25  | 0.0245 | 0.0279 | 42.74 | 1.689 | 14.897 | 3.1392 | -0.00916 | 0.03439 | -0.03691 | -0.00292 | 0.01096 | -0.01176 | -0.00007 | 0.00086  | -0.00086 |
| 8300  | 1888.56 | 123.9 | 3.51 | 0.27  | 0.0265 | 0.0244 | 42.86 | 1.690 | 15.004 | 3.1391 | -0.00602 | 0.03573 | -0.03402 | -0.00192 | 0.01138 | -0.01084 | 0.00093  | 0.00129  | 0.00006  |
| 8301  | 1887.84 | 124.2 | 3.51 | 0.27  | 0.0255 | 0.0238 | 42.98 | 1.689 | 15.133 | 3.1386 | -0.00528 | 0.03411 | -0.03550 | -0.00168 | 0.01087 | -0.01131 | 0.00117  | 0.00078  | -0.00041 |
| 8302  | 1887.98 | 124.3 | 3.51 | 0.26  | 0.0269 | 0.0237 | 43.11 | 1.689 | 15.261 | 3.1384 | -0.00527 | 0.03455 | -0.03663 | -0.00168 | 0.01101 | -0.01167 | 0.00117  | 0.00092  | -0.00077 |
| 8303  | 1888.13 | 124.1 | 3.51 | 0.26  | 0.0259 | 0.0212 | 43.24 | 1.689 | 15.386 | 3.1387 | -0.00571 | 0.03338 | -0.03960 | -0.00182 | 0.01063 | -0.01262 | 0.00103  | 0.00054  | -0.00172 |
| 8304  | 1887.84 | 124.2 | 3.51 | 0.26  | 0.0235 | 0.0274 | 43.36 | 1.689 | 15.518 | 3.1382 | -0.00529 | 0.03374 | -0.04249 | -0.00169 | 0.01075 | -0.01354 | 0.00116  | 0.00066  | -0.00264 |
| 8305  | 1887.84 | 124.1 | 3.51 | 0.25  | 0.0204 | 0.0266 | 43.49 | 1.688 | 15.654 | 3.1380 | -0.00769 | 0.03306 | -0.04088 | -0.00245 | 0.01054 | -0.01303 | 0.00040  | 0.00045  | -0.00213 |
| 8306  | 1888.13 | 124.1 | 3.51 | 0.26  | 0.0241 | 0.0231 | 43.61 | 1.689 | 15.767 | 3.1387 | -0.00720 | 0.03267 | -0.03728 | -0.00229 | 0.01041 | -0.01188 | 0.00055  | 0.00032  | -0.00098 |
| 8307  | 1887.84 | 124.2 | 3.51 | 0.27  | 0.0272 | 0.0220 | 43.74 | 1.689 | 15.882 | 3.1388 | -0.00929 | 0.03166 | -0.03641 | -0.00296 | 0.01009 | -0.01160 | -0.00011 | 0.00000  | -0.00070 |
| 8308  | 1888.13 | 124.3 | 3.51 | 0.26  | 0.0269 | 0.0171 | 43.86 | 1.689 | 16.018 | 3.1388 | -0.00855 | 0.03216 | -0.03320 | -0.00272 | 0.01025 | -0.01058 | 0.00012  | 0.00015  | 0.00032  |
| 8309  | 1887.84 | 124.2 | 3.51 | 0.25  | 0.0252 | 0.0208 | 43.99 | 1.689 | 16.147 | 3.1388 | -0.00978 | 0.03158 | -0.03041 | -0.00311 | 0.01006 | -0.00969 | -0.00027 | -0.00003 | 0.00121  |
| 8310  | 1888.13 | 123.9 | 3.51 | 0.25  | 0.0241 | 0.0212 | 44.11 | 1.688 | 16.274 | 3.1391 | -0.00902 | 0.03123 | -0.03042 | -0.00287 | 0.00995 | -0.00969 | -0.00002 | -0.00014 | 0.00121  |
| 8311  | 1888.27 | 124.0 | 3.51 | 0.23  | 0.0217 | 0.0264 | 44.24 | 1.688 | 16.414 | 3.1393 | -0.00983 | 0.03016 | -0.03023 | -0.00313 | 0.00961 | -0.00963 | -0.00028 | -0.00048 | 0.00127  |
| 8312  | 1888.27 | 124.2 | 3.51 | 0.24  | 0.0214 | 0.0290 | 44.36 | 1.688 | 16.533 | 3.1388 | -0.00893 | 0.03274 | -0.03085 | -0.00284 | 0.01043 | -0.00983 | 0.00000  | 0.00034  | 0.00107  |
| 8313  | 1887.84 | 124.2 | 3.51 | 0.24  | 0.0241 | 0.0259 | 44.49 | 1.688 | 16.655 | 3.1393 | -0.00895 | 0.03059 | -0.03159 | -0.00285 | 0.00974 | -0.01006 | 0.00000  | -0.00035 | 0.00084  |
| 8314  | 1888.27 | 124.2 | 3.51 | 0.24  | 0.0214 | 0.0281 | 44.61 | 1.688 | 16.782 | 3.1390 | -0.00929 | 0.03125 | -0.03185 | -0.00296 | 0.00995 | -0.01015 | -0.00011 | -0.00014 | 0.00075  |
| 8315  | 1887.98 | 124.2 | 3.51 | 0.25  | 0.0238 | 0.0257 | 44.74 | 1.689 | 16.896 | 3.1389 | -0.00852 | 0.03102 | -0.03355 | -0.00272 | 0.00988 | -0.01069 | 0.00013  | -0.00021 | 0.00021  |
| 8316  | 1888.27 | 124.1 | 3.51 | 0.24  | 0.0211 | 0.0270 | 44.86 | 1.688 | 17.038 | 3.1387 | -0.00827 | 0.03239 | -0.03233 | -0.00264 | 0.01032 | -0.01030 | 0.00021  | 0.00023  | 0.00060  |
| 8317  | 1887.98 | 124.1 | 3.51 | 0.24  | 0.0231 | 0.0272 | 44.99 | 1.688 | 17.160 | 3.1394 | -0.00887 | 0.03183 | -0.03369 | -0.00283 | 0.01014 | -0.01073 | 0.00002  | 0.00005  | 0.00017  |
| 8318  | 1887.84 | 124.2 | 3.51 | 0.24  | 0.0262 | 0.0214 | 45.11 | 1.688 | 17.273 | 3.1391 | -0.00964 | 0.03130 | -0.03438 | -0.00307 | 0.00997 | -0.01095 | -0.00022 | -0.00012 | -0.00005 |
| 8319  | 1887.84 | 124.1 | 3.51 | 0.26  | 0.0241 | 0.0240 | 45.24 | 1.689 | 17.389 | 3.1386 | -0.00835 | 0.03243 | -0.03439 | -0.00266 | 0.01033 | -0.01096 | 0.00019  | 0.00024  | -0.00006 |
| 8320  | 1887.84 | 124.1 | 3.51 | 0.26  | 0.0255 | 0.0210 | 45.36 | 1.689 | 17.515 | 3.1393 | -0.00823 | 0.03154 | -0.03467 | -0.00262 | 0.01005 | -0.01104 | 0.00022  | -0.00004 | -0.00014 |
| 8321  | 1887.84 | 124.0 | 3.51 | 0.24  | 0.0204 | 0.0285 | 45.49 | 1.688 | 17.660 | 3.1387 | -0.00916 | 0.03139 | -0.03285 | -0.00292 | 0.01000 | -0.01047 | -0.00007 | -0.00009 | 0.00043  |
| 8322  | 1888.27 | 124.1 | 3.51 | 0.25  | 0.0231 | 0.0234 | 45.61 | 1.688 | 17.778 | 3.1385 | -0.00921 | 0.03295 | -0.03260 | -0.00293 | 0.01050 | -0.01039 | -0.00009 | 0.00041  | 0.00051  |
| 8323  | 1888.27 | 124.0 | 3.51 | 0.23  | 0.0214 | 0.0309 | 45.73 | 1.688 | 17.910 | 3.1398 | -0.00949 | 0.03094 | -0.03373 | -0.00302 | 0.00985 | -0.01074 | -0.00017 | -0.00024 | 0.00016  |
| 8324  | 1887.84 | 124.0 | 3.51 | 0.24  | 0.0204 | 0.0313 | 45.86 | 1.688 | 18.032 | 3.1384 | -0.00844 | 0.03166 | -0.03384 | -0.00269 | 0.01009 | -0.01078 | 0.00016  | 0.00000  | 0.00011  |
| 8325  | 1887.70 | 124.1 | 3.51 | 0.25  | 0.0245 | 0.0270 | 45.98 | 1.689 | 18.145 | 3.1376 | -0.00808 | 0.03317 | -0.03213 | -0.00257 | 0.01057 | -0.01024 | 0.00027  | 0.00048  | 0.00066  |
| 8326  | 1887.98 | 124.1 | 3.51 | 0.24  | 0.0214 | 0.0300 | 46.11 | 1.688 | 18.280 | 3.1386 | -0.00926 | 0.03214 | -0.03426 | -0.00295 | 0.01024 | -0.01092 | -0.00010 | 0.00015  | -0.00002 |

Table A8. Run 138.

Run = 138

M = 1.60

xsppos = 42.349

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc   | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|---------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 8327  | 1887.70 | 124.1 | 3.51 | 0.65  | 0.0458 | -0.0033 | 21.36 | 1.689 | -6.476 | 3.1384 | -0.00909 | 0.03140 | -0.03493 | -0.00290 | 0.01001 | -0.01113 | 0.00000  | -0.00001 | -0.00004 |
| 8328  | 1887.84 | 124.1 | 3.51 | 0.65  | 0.0444 | -0.0003 | 21.49 | 1.688 | -6.348 | 3.1386 | -0.00882 | 0.03195 | -0.03542 | -0.00281 | 0.01018 | -0.01129 | 0.00008  | 0.00016  | -0.00020 |
| 8329  | 1887.98 | 123.9 | 3.51 | 0.66  | 0.0472 | -0.0034 | 21.61 | 1.689 | -6.235 | 3.1386 | -0.00964 | 0.03091 | -0.03422 | -0.00307 | 0.00985 | -0.01090 | -0.00018 | -0.00017 | 0.00019  |
| 8330  | 1888.13 | 124.1 | 3.51 | 0.65  | 0.0468 | -0.0027 | 21.74 | 1.689 | -6.109 | 3.1378 | -0.00852 | 0.03181 | -0.03472 | -0.00272 | 0.01014 | -0.01106 | 0.00018  | 0.00012  | 0.00002  |
| 8331  | 1888.13 | 124.0 | 3.51 | 0.65  | 0.0413 | 0.0017  | 21.86 | 1.688 | -5.975 | 3.1387 | -0.00934 | 0.03110 | -0.03472 | -0.00297 | 0.00991 | -0.01106 | -0.00008 | -0.00011 | 0.00003  |
| 8332  | 1887.98 | 124.1 | 3.51 | 0.66  | 0.0455 | -0.0053 | 21.98 | 1.689 | -5.860 | 3.1380 | -0.00915 | 0.03111 | -0.03518 | -0.00292 | 0.00991 | -0.01121 | -0.00002 | -0.00010 | -0.00012 |
| 8333  | 1887.98 | 124.1 | 3.51 | 0.65  | 0.0437 | -0.0081 | 22.11 | 1.688 | -5.726 | 3.1389 | -0.00842 | 0.03106 | -0.03527 | -0.00268 | 0.00990 | -0.01124 | 0.00021  | -0.00012 | -0.00015 |
| 8334  | 1887.98 | 124.0 | 3.51 | 0.65  | 0.0472 | -0.0053 | 22.24 | 1.689 | -5.608 | 3.1389 | -0.00739 | 0.03145 | -0.03409 | -0.00236 | 0.01002 | -0.01086 | 0.00054  | 0.00000  | 0.00023  |
| 8335  | 1887.84 | 124.0 | 3.51 | 0.65  | 0.0482 | -0.0113 | 22.36 | 1.689 | -5.482 | 3.1391 | -0.00978 | 0.03112 | -0.03607 | -0.00312 | 0.00991 | -0.01149 | -0.00022 | -0.00010 | -0.00040 |
| 8336  | 1887.84 | 124.0 | 3.51 | 0.65  | 0.0451 | -0.0046 | 22.49 | 1.689 | -5.354 | 3.1388 | -0.00918 | 0.03165 | -0.03474 | -0.00293 | 0.01008 | -0.01107 | -0.00003 | 0.00007  | 0.00002  |
| 8337  | 1887.84 | 124.2 | 3.51 | 0.65  | 0.0458 | -0.0042 | 22.61 | 1.689 | -5.230 | 3.1396 | -0.00963 | 0.03062 | -0.03444 | -0.00307 | 0.00975 | -0.01097 | -0.00017 | -0.00026 | 0.00012  |
| 8338  | 1887.41 | 124.3 | 3.50 | 0.65  | 0.0465 | -0.0066 | 22.74 | 1.689 | -5.103 | 3.1384 | -0.00892 | 0.03073 | -0.03630 | -0.00284 | 0.00979 | -0.01157 | 0.00005  | -0.00022 | -0.00048 |
| 8339  | 1887.70 | 124.2 | 3.51 | 0.64  | 0.0410 | 0.0016  | 22.86 | 1.688 | -4.970 | 3.1394 | -0.00979 | 0.03048 | -0.03243 | -0.00312 | 0.00971 | -0.01033 | -0.00023 | -0.00031 | 0.00076  |
| 8340  | 1887.84 | 124.2 | 3.51 | 0.64  | 0.0406 | 0.0042  | 22.99 | 1.688 | -4.842 | 3.1378 | -0.00676 | 0.03150 | -0.03483 | -0.00215 | 0.01004 | -0.01110 | 0.00074  | 0.00002  | -0.00001 |
| 8341  | 1887.41 | 124.1 | 3.51 | 0.65  | 0.0427 | -0.0012 | 23.11 | 1.688 | -4.725 | 3.1388 | -0.00933 | 0.03109 | -0.03741 | -0.00297 | 0.00990 | -0.01192 | -0.00008 | -0.00011 | -0.00083 |
| 8342  | 1888.13 | 124.0 | 3.51 | 0.64  | 0.0420 | -0.0016 | 23.23 | 1.688 | -4.598 | 3.1406 | -0.00988 | 0.03042 | -0.03558 | -0.00315 | 0.00968 | -0.01133 | -0.00025 | -0.00033 | -0.00024 |
| 8343  | 1887.84 | 123.9 | 3.51 | 0.65  | 0.0468 | -0.0064 | 23.36 | 1.689 | -4.480 | 3.1392 | -0.00917 | 0.03136 | -0.03436 | -0.00292 | 0.00999 | -0.01095 | -0.00003 | -0.00003 | 0.00014  |
| 8344  | 1887.84 | 124.0 | 3.51 | 0.65  | 0.0468 | -0.0092 | 23.49 | 1.689 | -4.355 | 3.1393 | -0.00797 | 0.03117 | -0.03633 | -0.00254 | 0.00993 | -0.01157 | 0.00035  | -0.00009 | -0.00049 |
| 8345  | 1887.84 | 123.9 | 3.51 | 0.65  | 0.0441 | -0.0033 | 23.61 | 1.689 | -4.230 | 3.1388 | -0.00797 | 0.03144 | -0.03464 | -0.00254 | 0.01002 | -0.01104 | 0.00035  | 0.00000  | 0.00005  |
| 8346  | 1887.98 | 123.9 | 3.51 | 0.65  | 0.0434 | -0.0074 | 23.74 | 1.689 | -4.103 | 3.1402 | -0.01094 | 0.03150 | -0.03496 | -0.00348 | 0.01003 | -0.01113 | -0.00059 | 0.00001  | -0.00004 |
| 8347  | 1887.98 | 123.9 | 3.51 | 0.65  | 0.0458 | -0.0051 | 23.86 | 1.689 | -3.985 | 3.1403 | -0.01003 | 0.03105 | -0.03605 | -0.00319 | 0.00989 | -0.01148 | -0.00030 | -0.00013 | -0.00039 |
| 8348  | 1887.70 | 123.9 | 3.51 | 0.65  | 0.0413 | -0.0011 | 23.99 | 1.688 | -3.848 | 3.1391 | -0.00986 | 0.03178 | -0.03394 | -0.00314 | 0.01013 | -0.01081 | -0.00025 | 0.00011  | 0.00028  |
| 8349  | 1887.98 | 124.0 | 3.51 | 0.65  | 0.0434 | -0.0046 | 24.11 | 1.688 | -3.727 | 3.1380 | -0.00813 | 0.03167 | -0.03365 | -0.00259 | 0.01009 | -0.01072 | 0.00030  | 0.00008  | 0.00036  |
| 8350  | 1888.13 | 124.0 | 3.51 | 0.65  | 0.0437 | 0.0031  | 24.23 | 1.688 | -3.603 | 3.1396 | -0.00949 | 0.03029 | -0.03519 | -0.00302 | 0.00965 | -0.01121 | -0.00013 | -0.00037 | -0.00012 |
| 8351  | 1887.98 | 124.0 | 3.51 | 0.65  | 0.0437 | 0.0059  | 24.36 | 1.688 | -3.478 | 3.1391 | -0.00984 | 0.03270 | -0.03359 | -0.00314 | 0.01042 | -0.01070 | -0.00024 | 0.00040  | 0.00039  |
| 8352  | 1887.98 | 123.9 | 3.51 | 0.65  | 0.0430 | 0.0073  | 24.49 | 1.688 | -3.349 | 3.1399 | -0.00957 | 0.03366 | -0.03399 | -0.00305 | 0.01072 | -0.01083 | -0.00016 | 0.00070  | 0.00026  |
| 8353  | 1887.98 | 124.1 | 3.51 | 0.65  | 0.0461 | 0.0053  | 24.61 | 1.689 | -3.230 | 3.1392 | -0.00797 | 0.03376 | -0.03608 | -0.00254 | 0.01075 | -0.01149 | 0.00035  | 0.00074  | -0.00041 |
| 8354  | 1887.70 | 124.2 | 3.51 | 0.65  | 0.0417 | 0.0066  | 24.73 | 1.688 | -3.100 | 3.1388 | -0.00795 | 0.03546 | -0.03446 | -0.00253 | 0.01130 | -0.01098 | 0.00036  | 0.00128  | 0.00011  |
| 8355  | 1888.13 | 124.3 | 3.51 | 0.64  | 0.0406 | 0.0060  | 24.86 | 1.688 | -2.968 | 3.1396 | -0.00798 | 0.03208 | -0.03376 | -0.00254 | 0.01022 | -0.01075 | 0.00035  | 0.00020  | 0.00033  |
| 8356  | 1887.84 | 124.2 | 3.51 | 0.65  | 0.0434 | 0.0047  | 24.98 | 1.688 | -2.852 | 3.1397 | -0.00802 | 0.03037 | -0.03457 | -0.00256 | 0.00967 | -0.01101 | 0.00034  | -0.00034 | 0.00008  |
| 8357  | 1888.27 | 124.2 | 3.51 | 0.65  | 0.0441 | 0.0042  | 25.11 | 1.689 | -2.731 | 3.1401 | -0.00929 | 0.02973 | -0.03563 | -0.00296 | 0.00947 | -0.01135 | -0.00006 | -0.00055 | -0.00026 |
| 8358  | 1887.98 | 123.9 | 3.51 | 0.65  | 0.0423 | 0.0070  | 25.24 | 1.688 | -2.599 | 3.1378 | -0.00979 | 0.03077 | -0.03513 | -0.00312 | 0.00981 | -0.01120 | -0.00023 | -0.00021 | -0.00011 |
| 8359  | 1887.98 | 123.9 | 3.51 | 0.64  | 0.0399 | 0.0057  | 25.36 | 1.688 | -2.466 | 3.1389 | -0.00994 | 0.03274 | -0.03377 | -0.00317 | 0.01043 | -0.01076 | -0.00027 | 0.00041  | 0.00033  |
| 8360  | 1888.13 | 123.9 | 3.51 | 0.64  | 0.0417 | 0.0075  | 25.48 | 1.688 | -2.347 | 3.1394 | -0.00933 | 0.03549 | -0.03378 | -0.00297 | 0.01131 | -0.01076 | -0.00008 | 0.00129  | 0.00033  |
| 8361  | 1887.98 | 123.9 | 3.51 | 0.64  | 0.0423 | 0.0060  | 25.61 | 1.688 | -2.222 | 3.1396 | -0.00759 | 0.03862 | -0.03395 | -0.00242 | 0.01230 | -0.01081 | 0.00048  | 0.00229  | 0.00028  |
| 8362  | 1887.70 | 123.9 | 3.51 | 0.65  | 0.0427 | 0.0006  | 25.74 | 1.688 | -2.099 | 3.1389 | -0.00513 | 0.03868 | -0.03357 | -0.00163 | 0.01232 | -0.01069 | 0.00126  | 0.00231  | 0.00039  |
| 8363  | 1887.55 | 124.0 | 3.51 | 0.64  | 0.0400 | 0.0038  | 25.86 | 1.688 | -1.964 | 3.1392 | -0.00243 | 0.03651 | -0.03150 | -0.00078 | 0.01163 | -0.01003 | 0.00212  | 0.00161  | 0.00106  |
| 8364  | 1887.84 | 124.1 | 3.51 | 0.64  | 0.0427 | 0.0006  | 25.99 | 1.688 | -1.845 | 3.1389 | -0.00243 | 0.03629 | -0.03022 | -0.00077 | 0.01156 | -0.00963 | 0.00212  | 0.00155  | 0.00146  |
| 8365  | 1888.27 | 124.2 | 3.51 | 0.64  | 0.0406 | 0.0042  | 26.11 | 1.688 | -1.717 | 3.1399 | -0.00391 | 0.03204 | -0.03209 | -0.00124 | 0.01020 | -0.01022 | 0.00165  | 0.00019  | 0.00087  |
| 8366  | 1887.84 | 124.3 | 3.51 | 0.64  | 0.0406 | -0.0005 | 26.23 | 1.688 | -1.593 | 3.1395 | -0.00608 | 0.02718 | -0.03540 | -0.00194 | 0.00866 | -0.01128 | 0.00096  | -0.00136 | -0.00019 |
| 8367  | 1887.70 | 124.2 | 3.51 | 0.64  | 0.0410 | -0.0012 | 26.36 | 1.688 | -1.470 | 3.1392 | -0.00969 | 0.02841 | -0.03596 | -0.00309 | 0.00905 | -0.01146 | -0.00020 | -0.00096 | -0.00037 |
| 8368  | 1888.13 | 124.0 | 3.51 | 0.65  | 0.0430 | -0.0020 | 26.49 | 1.689 | -1.356 | 3.1396 | -0.01121 | 0.03027 | -0.03458 | -0.00357 | 0.00964 | -0.01102 | -0.00068 | -0.00037 | 0.00007  |
| 8369  | 1887.98 | 124.0 | 3.51 | 0.64  | 0.0386 | 0.0021  | 26.61 | 1.688 | -1.215 | 3.1395 | -0.01215 | 0.03718 | -0.03434 | -0.00387 | 0.01184 | -0.01094 | -0.00098 | 0.00183  | 0.00015  |
| 8370  | 1888.13 | 124.0 | 3.51 | 0.64  | 0.0396 | 0.0017  | 26.73 | 1.688 | -1.093 | 3.1400 | -0.00816 | 0.04075 | -0.03171 | -0.00260 | 0.01298 | -0.01010 | 0.00029  | 0.00296  | 0.00099  |
| 8371  | 1888.13 | 124.0 | 3.51 | 0.64  | 0.0379 | 0.0036  | 26.86 | 1.688 | -0.966 | 3.1398 | -0.00467 | 0.04194 | -0.02814 | -0.00149 | 0.01336 | -0.00896 | 0.00141  | 0.00334  | 0.00213  |
| 8372  | 1887.98 | 123.9 | 3.51 | 0.65  | 0.0420 | 0.0021  | 26.99 | 1.688 | -0.849 | 3.1387 | -0.00006 | 0.04184 | -0.02582 | -0.00002 | 0.01333 | -0.00823 | 0.00287  | 0.00331  | 0.00286  |
| 8373  | 1888.27 | 123.9 | 3.51 | 0.64  | 0.0413 | 0.0008  | 27.11 | 1.688 | -0.720 | 3.1397 | -0.00136 | 0.03942 | -0.02583 | -0.00043 | 0.01255 | -0.00823 | 0.00246  | 0.00254  | 0.00286  |
| 8374  | 1887.98 | 123.9 | 3.51 | 0.65  | 0.0427 | -0.0031 | 27.23 | 1.688 | -0.603 | 3.1395 | -0.00078 | 0.03476 | -0.02990 | -0.00025 | 0.01107 | -0.00953 | 0.00264  | 0.00105  | 0.00156  |
| 8375  | 1888.27 | 123.8 | 3.51 | 0.64  | 0.0434 | -0.0027 | 27.36 | 1.688 | -0.471 | 3.1398 | -0.00309 | 0.03145 | -0.03530 | -0.00098 | 0.01002 | -0.01124 | 0.00191  | 0.00000  | -0.00015 |
| 8376  | 1887.70 | 123.9 | 3.51 | 0.65  | 0.0444 | -0.0040 | 27.49 | 1.688 | -0.349 | 3.1387 | -0.00589 | 0.03064 | -0.03666 | -0.00188 | 0.00976 | -0.01168 | 0.00102  | -0.00025 | -0.00059 |
| 8377  | 1888.27 | 123.9 | 3.51 | 0.65  | 0.0399 | 0.0019  | 27.61 | 1.688 | -0.224 | 3.1393 | -0.01082 | 0.03143 | -0.03678 | -0.00345 | 0.01001 | -0.01172 | -0.00055 | 0.00000  | -0.00063 |
| 8378  | 1888.42 | 124.0 | 3.51 | 0.65  | 0.0410 | 0.0016  | 27.74 | 1.688 | -0.098 | 3.1393 | -0.01036 | 0.03654 | -0.03181 | -0.00330 | 0.01164 | -0.01013 | -0.00041 | 0.00162  | 0.00095  |
| 8379  | 1887.98 | 124.0 | 3.51 | 0.65  | 0.0448 | -0.0038 | 27.86 | 1.689 | 0.022  | 3.1393 | -0.01032 | 0.04103 | -0.03084 | -0.00329 | 0.01307 | -0.00982 | -0.00039 | 0.00306  | 0.00126  |
| 8380  | 1887.84 | 124.0 | 3.51 | 0.64  | 0.0396 | 0.0045  | 27.98 | 1.688 | 0.155  | 3.1393 | -0.00286 |         |          |          |         |          |          |          |          |

Table A8. Continued.

Run = 138

M = 1.60

xsp05 = 42.347

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc   | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c  |
|-------|---------|-------|------|-------|--------|---------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|---------|
| 8400  | 1888.13 | 124.1 | 3.51 | 0.65  | 0.0472 | 0.0012  | 30.49 | 1.689 | 2.645  | 3.1396 | -0.00016 | 0.04081 | -0.02134 | -0.00005 | 0.01300 | -0.00680 | 0.00284  | 0.00298  | 0.00429 |
| 8401  | 1888.27 | 124.1 | 3.51 | 0.65  | 0.0454 | -0.0016 | 30.61 | 1.689 | 2.772  | 3.1397 | -0.00036 | 0.04134 | -0.02243 | -0.00011 | 0.01317 | -0.00715 | 0.00278  | 0.00315  | 0.00394 |
| 8402  | 1887.84 | 124.2 | 3.51 | 0.65  | 0.0485 | -0.0018 | 30.74 | 1.689 | 2.894  | 3.1389 | -0.00030 | 0.04148 | -0.02320 | -0.00010 | 0.01322 | -0.00739 | 0.00280  | 0.00320  | 0.00370 |
| 8403  | 1887.98 | 124.4 | 3.50 | 0.64  | 0.0451 | -0.0008 | 30.86 | 1.688 | 3.025  | 3.1401 | -0.00136 | 0.04158 | -0.02494 | -0.00043 | 0.01324 | -0.00794 | 0.00246  | 0.00323  | 0.00315 |
| 8404  | 1887.84 | 124.3 | 3.51 | 0.65  | 0.0472 | -0.0006 | 30.98 | 1.689 | 3.146  | 3.1381 | 0.00080  | 0.04320 | -0.02346 | 0.00026  | 0.01377 | -0.00748 | 0.00315  | 0.00375  | 0.00361 |
| 8405  | 1887.70 | 124.2 | 3.51 | 0.65  | 0.0479 | -0.0012 | 31.11 | 1.689 | 3.267  | 3.1392 | 0.00154  | 0.04311 | -0.02387 | 0.00049  | 0.01373 | -0.00760 | 0.00338  | 0.00372  | 0.00349 |
| 8406  | 1887.98 | 124.3 | 3.51 | 0.65  | 0.0475 | 0.0014  | 31.23 | 1.689 | 3.394  | 3.1395 | 0.00051  | 0.04369 | -0.02369 | 0.00016  | 0.01392 | -0.00755 | 0.00306  | 0.00390  | 0.00354 |
| 8407  | 1887.98 | 124.4 | 3.51 | 0.64  | 0.0430 | 0.0073  | 31.36 | 1.688 | 3.528  | 3.1393 | 0.00187  | 0.04434 | -0.02382 | 0.00060  | 0.01412 | -0.00759 | 0.00349  | 0.00411  | 0.00350 |
| 8408  | 1887.98 | 124.3 | 3.51 | 0.65  | 0.0468 | 0.0066  | 31.48 | 1.689 | 3.645  | 3.1399 | 0.00239  | 0.04348 | -0.02479 | 0.00076  | 0.01385 | -0.00789 | 0.00365  | 0.00383  | 0.00319 |
| 8409  | 1887.84 | 124.1 | 3.51 | 0.64  | 0.0441 | 0.0135  | 31.61 | 1.688 | 3.775  | 3.1395 | 0.00284  | 0.04330 | -0.02512 | 0.00090  | 0.01379 | -0.00800 | 0.00380  | 0.00378  | 0.00309 |
| 8410  | 1887.98 | 124.2 | 3.51 | 0.65  | 0.0482 | 0.0055  | 31.74 | 1.689 | 3.894  | 3.1400 | 0.00120  | 0.04086 | -0.02521 | 0.00038  | 0.01301 | -0.00803 | 0.00328  | 0.00300  | 0.00306 |
| 8411  | 1888.13 | 124.2 | 3.51 | 0.65  | 0.0468 | 0.0057  | 31.86 | 1.689 | 4.023  | 3.1399 | 0.00119  | 0.03993 | -0.02447 | 0.00038  | 0.01272 | -0.00779 | 0.00327  | 0.00270  | 0.00329 |
| 8412  | 1887.98 | 124.1 | 3.51 | 0.64  | 0.0472 | 0.0022  | 31.98 | 1.688 | 4.146  | 3.1391 | 0.00107  | 0.04049 | -0.02474 | 0.00034  | 0.01290 | -0.00788 | 0.00323  | 0.00288  | 0.00321 |
| 8413  | 1887.84 | 124.1 | 3.51 | 0.65  | 0.0461 | 0.0035  | 32.11 | 1.688 | 4.273  | 3.1397 | -0.00130 | 0.04307 | -0.02309 | -0.00041 | 0.01372 | -0.00735 | 0.00248  | 0.00370  | 0.00373 |
| 8414  | 1887.84 | 124.1 | 3.51 | 0.65  | 0.0475 | 0.0005  | 32.23 | 1.689 | 4.394  | 3.1396 | -0.00012 | 0.04390 | -0.02345 | -0.00004 | 0.01398 | -0.00747 | 0.00286  | 0.00397  | 0.00362 |
| 8415  | 1887.55 | 124.2 | 3.51 | 0.65  | 0.0503 | -0.0036 | 32.36 | 1.689 | 4.515  | 3.1389 | 0.00141  | 0.04761 | -0.02289 | 0.00045  | 0.01517 | -0.00729 | 0.00384  | 0.00515  | 0.00379 |
| 8416  | 1887.98 | 124.1 | 3.51 | 0.65  | 0.0468 | 0.0010  | 32.49 | 1.689 | 4.648  | 3.1397 | 0.00529  | 0.04603 | -0.02264 | 0.00169  | 0.01466 | -0.00721 | 0.00458  | 0.00464  | 0.00388 |
| 8417  | 1888.13 | 124.1 | 3.51 | 0.65  | 0.0492 | -0.0014 | 32.61 | 1.689 | 4.762  | 3.1391 | 0.00618  | 0.04738 | -0.02260 | 0.00197  | 0.01509 | -0.00720 | 0.00486  | 0.00508  | 0.00389 |
| 8418  | 1887.84 | 124.1 | 3.51 | 0.65  | 0.0499 | -0.0038 | 32.74 | 1.689 | 4.891  | 3.1396 | 0.00765  | 0.04701 | -0.02295 | 0.00244  | 0.01434 | -0.00731 | 0.00533  | 0.00432  | 0.00378 |
| 8419  | 1887.98 | 124.3 | 3.51 | 0.65  | 0.0496 | -0.0003 | 32.86 | 1.689 | 5.019  | 3.1394 | 0.00498  | 0.04485 | -0.02214 | 0.00159  | 0.01429 | -0.00705 | 0.00448  | 0.00427  | 0.00404 |
| 8420  | 1888.13 | 124.3 | 3.51 | 0.65  | 0.0492 | -0.0014 | 32.99 | 1.689 | 5.143  | 3.1398 | 0.00451  | 0.04496 | -0.02322 | 0.00144  | 0.01432 | -0.00740 | 0.00433  | 0.00430  | 0.00369 |
| 8421  | 1887.84 | 124.3 | 3.51 | 0.64  | 0.0468 | 0.0010  | 33.11 | 1.688 | 5.274  | 3.1390 | 0.00369  | 0.04540 | -0.02305 | 0.00118  | 0.01446 | -0.00734 | 0.00407  | 0.00445  | 0.00374 |
| 8422  | 1887.84 | 124.2 | 3.51 | 0.65  | 0.0472 | -0.0006 | 33.24 | 1.689 | 5.395  | 3.1387 | 0.00521  | 0.04494 | -0.02252 | 0.00166  | 0.01432 | -0.00718 | 0.00455  | 0.00430  | 0.00391 |
| 8423  | 1887.84 | 124.3 | 3.51 | 0.65  | 0.0489 | -0.0025 | 33.36 | 1.689 | 5.520  | 3.1390 | 0.00581  | 0.04567 | -0.02176 | 0.00185  | 0.01455 | -0.00693 | 0.00475  | 0.00453  | 0.00415 |
| 8424  | 1887.70 | 124.2 | 3.51 | 0.64  | 0.0444 | 0.0053  | 33.49 | 1.688 | 5.653  | 3.1381 | 0.00551  | 0.04695 | -0.01689 | 0.00176  | 0.01496 | -0.00538 | 0.00465  | 0.00495  | 0.00571 |
| 8425  | 1887.98 | 124.1 | 3.51 | 0.64  | 0.0441 | 0.0060  | 33.61 | 1.688 | 5.780  | 3.1403 | 0.00506  | 0.04687 | -0.01888 | 0.00161  | 0.01492 | -0.00601 | 0.00450  | 0.00491  | 0.00508 |
| 8426  | 1887.98 | 124.1 | 3.51 | 0.65  | 0.0465 | -0.0001 | 33.74 | 1.688 | 5.900  | 3.1392 | 0.00799  | 0.04969 | -0.01918 | 0.00255  | 0.01583 | -0.00611 | 0.00544  | 0.00581  | 0.00498 |
| 8427  | 1887.98 | 123.9 | 3.51 | 0.64  | 0.0444 | -0.0012 | 33.86 | 1.688 | 6.027  | 3.1408 | 0.00749  | 0.04925 | -0.01747 | 0.00239  | 0.01568 | -0.00556 | 0.00528  | 0.00566  | 0.00553 |
| 8428  | 1887.84 | 124.0 | 3.51 | 0.65  | 0.0444 | -0.0003 | 33.99 | 1.688 | 6.150  | 3.1397 | 0.00904  | 0.04985 | -0.02032 | 0.00288  | 0.01588 | -0.00647 | 0.00577  | 0.00586  | 0.00462 |
| 8429  | 1888.13 | 124.1 | 3.51 | 0.64  | 0.0461 | -0.0040 | 34.11 | 1.688 | 6.274  | 3.1393 | 0.01034  | 0.05313 | -0.01957 | 0.00329  | 0.01692 | -0.00623 | 0.00619  | 0.00691  | 0.00486 |
| 8430  | 1887.84 | 124.1 | 3.51 | 0.64  | 0.0461 | -0.0012 | 34.24 | 1.688 | 6.400  | 3.1388 | 0.01142  | 0.05548 | -0.01799 | 0.00364  | 0.01768 | -0.00573 | 0.00653  | 0.00766  | 0.00536 |
| 8431  | 1887.84 | 124.1 | 3.51 | 0.64  | 0.0461 | -0.0021 | 34.36 | 1.688 | 6.524  | 3.1391 | 0.01248  | 0.05542 | -0.02128 | 0.00398  | 0.01765 | -0.00678 | 0.00687  | 0.00764  | 0.00431 |
| 8432  | 1887.98 | 124.2 | 3.51 | 0.65  | 0.0441 | -0.0033 | 34.49 | 1.688 | 6.651  | 3.1405 | 0.01340  | 0.05272 | -0.02221 | 0.00427  | 0.01679 | -0.00707 | 0.00716  | 0.00677  | 0.00401 |
| 8433  | 1887.98 | 124.2 | 3.51 | 0.64  | 0.0448 | -0.0038 | 34.61 | 1.688 | 6.775  | 3.1403 | 0.01326  | 0.05501 | -0.01804 | 0.00422  | 0.01752 | -0.00574 | 0.00712  | 0.00750  | 0.00534 |
| 8434  | 1887.98 | 124.2 | 3.51 | 0.64  | 0.0427 | 0.0006  | 34.73 | 1.688 | 6.902  | 3.1388 | 0.01426  | 0.05525 | -0.01656 | 0.00454  | 0.01760 | -0.00528 | 0.00744  | 0.00759  | 0.00581 |
| 8435  | 1888.27 | 124.0 | 3.51 | 0.64  | 0.0420 | 0.0021  | 34.86 | 1.688 | 7.027  | 3.1396 | 0.01332  | 0.05505 | -0.01523 | 0.00424  | 0.01753 | -0.00485 | 0.00714  | 0.00752  | 0.00624 |
| 8436  | 1888.13 | 124.1 | 3.51 | 0.65  | 0.0410 | 0.0062  | 34.99 | 1.688 | 7.151  | 3.1393 | 0.01672  | 0.05510 | -0.01403 | 0.00533  | 0.01755 | -0.00447 | 0.00822  | 0.00754  | 0.00662 |
| 8437  | 1888.13 | 124.3 | 3.51 | 0.64  | 0.0444 | 0.0006  | 35.11 | 1.688 | 7.277  | 3.1392 | 0.01799  | 0.05486 | -0.01344 | 0.00573  | 0.01748 | -0.00428 | 0.00862  | 0.00746  | 0.00681 |
| 8438  | 1887.84 | 124.1 | 3.51 | 0.65  | 0.0417 | 0.0010  | 35.23 | 1.688 | 7.396  | 3.1391 | 0.01566  | 0.05077 | -0.01350 | 0.00499  | 0.01617 | -0.00430 | 0.00788  | 0.00616  | 0.00679 |
| 8439  | 1887.98 | 124.1 | 3.51 | 0.64  | 0.0372 | 0.0060  | 35.36 | 1.688 | 7.539  | 3.1400 | 0.01184  | 0.04823 | -0.01452 | 0.00377  | 0.01536 | -0.00463 | 0.00666  | 0.00534  | 0.00646 |
| 8440  | 1887.55 | 124.1 | 3.51 | 0.64  | 0.0376 | 0.0071  | 35.48 | 1.688 | 7.660  | 3.1391 | 0.01069  | 0.04517 | -0.01499 | 0.00341  | 0.01439 | -0.00478 | 0.00630  | 0.00437  | 0.00631 |
| 8441  | 1887.98 | 124.1 | 3.51 | 0.64  | 0.0444 | -0.0012 | 35.61 | 1.688 | 7.773  | 3.1388 | 0.00966  | 0.04536 | -0.01030 | 0.00308  | 0.01445 | -0.00328 | 0.00597  | 0.00444  | 0.00781 |
| 8442  | 1888.42 | 124.0 | 3.51 | 0.65  | 0.0427 | -0.0022 | 35.73 | 1.688 | 7.900  | 3.1399 | 0.00591  | 0.04248 | -0.01086 | 0.00188  | 0.01353 | -0.00346 | 0.00477  | 0.00351  | 0.00763 |
| 8443  | 1888.42 | 124.1 | 3.51 | 0.64  | 0.0417 | 0.0019  | 35.86 | 1.688 | 8.028  | 3.1396 | 0.00422  | 0.04199 | -0.01006 | 0.00134  | 0.01338 | -0.00320 | 0.00424  | 0.00336  | 0.00788 |
| 8444  | 1887.84 | 124.1 | 3.51 | 0.64  | 0.0389 | 0.0014  | 35.99 | 1.688 | 8.159  | 3.1398 | 0.00323  | 0.03857 | -0.01196 | 0.00103  | 0.01228 | -0.00381 | 0.00392  | 0.00227  | 0.00728 |
| 8445  | 1887.70 | 124.1 | 3.51 | 0.64  | 0.0386 | 0.0058  | 36.11 | 1.688 | 8.283  | 3.1387 | 0.00304  | 0.03462 | -0.01059 | 0.00011  | 0.01103 | -0.00338 | 0.00300  | 0.0101   | 0.00771 |
| 8446  | 1887.70 | 123.9 | 3.51 | 0.64  | 0.0382 | 0.0038  | 36.24 | 1.688 | 8.412  | 3.1397 | -0.00175 | 0.03010 | -0.01295 | -0.00056 | 0.00959 | -0.00413 | 0.00234  | -0.00043 | 0.00696 |
| 8447  | 1888.13 | 123.8 | 3.51 | 0.65  | 0.0417 | 0.0047  | 36.36 | 1.689 | 8.521  | 3.1401 | -0.00373 | 0.02890 | -0.01316 | -0.00119 | 0.00920 | -0.00419 | 0.00171  | -0.00081 | 0.00690 |
| 8448  | 1887.98 | 124.0 | 3.51 | 0.65  | 0.0410 | 0.0034  | 36.48 | 1.688 | 8.652  | 3.1396 | -0.00770 | 0.02225 | -0.01684 | -0.00245 | 0.00709 | -0.00536 | 0.00044  | -0.00293 | 0.00573 |
| 8449  | 1887.98 | 124.1 | 3.51 | 0.64  | 0.0406 | 0.0014  | 36.61 | 1.688 | 8.779  | 3.1396 | -0.01288 | 0.01663 | -0.01681 | -0.00410 | 0.00530 | -0.00535 | -0.00121 | -0.00472 | 0.00573 |
| 8450  | 1888.13 | 124.0 | 3.51 | 0.64  | 0.0375 | 0.0081  | 36.74 | 1.688 | 8.907  | 3.1390 | -0.01872 | 0.01169 | -0.01902 | -0.00596 | 0.00373 | -0.00606 | -0.00307 | -0.00629 | 0.00503 |
| 8451  | 1887.84 | 124.1 | 3.51 | 0.64  | 0.0430 | 0.0036  | 36.86 | 1.688 | 9.027  | 3.1401 | -0.02096 | 0.00755 | -0.02183 | -0.00668 | 0.00241 | -0.00695 | -0.00378 | -0.00761 | 0.00413 |
| 8452  | 1887.84 | 124.1 | 3.51 | 0.65  | 0.0396 | 0.0073  | 36.99 | 1.688 | 9.153  | 3.1397 | -0.02728 | 0.00397 | -0.02591 | -0.00869 | 0.00126 | -0.00825 | -0.00579 | -0.00875 | 0.00284 |
| 8453  | 1887.84 | 124.1 | 3.51 | 0.65  | 0.0441 | 0.0051  | 37.11 | 1.689 | 9.270  | 3.1400 | -0.03026 | 0       |          |          |         |          |          |          |         |

Table A8. Concluded.

Run = 138

M = 1.60

xsppos = 42.347

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc   | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|---------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 8473  | 1888.13 | 124.0 | 3.51 | 0.65  | 0.0437 | 0.0105  | 39.61 | 1.688 | 11.773 | 3.1399 | -0.01311 | 0.02458 | -0.05756 | -0.00417 | 0.00783 | -0.01833 | -0.00128 | -0.00219 | -0.00725 |
| 8474  | 1888.27 | 124.0 | 3.51 | 0.65  | 0.0475 | 0.0023  | 39.74 | 1.689 | 11.893 | 3.1399 | -0.01426 | 0.02810 | -0.05434 | -0.00454 | 0.00895 | -0.01731 | -0.00165 | -0.00107 | -0.00622 |
| 8475  | 1887.98 | 123.9 | 3.51 | 0.66  | 0.0468 | 0.0038  | 39.86 | 1.689 | 12.014 | 3.1400 | -0.01405 | 0.02726 | -0.04975 | -0.00448 | 0.00868 | -0.01584 | -0.00158 | -0.00133 | -0.00476 |
| 8476  | 1887.98 | 123.8 | 3.51 | 0.65  | 0.0454 | 0.0031  | 39.99 | 1.688 | 12.150 | 3.1399 | -0.01349 | 0.02887 | -0.04599 | -0.00430 | 0.00920 | -0.01465 | -0.00140 | -0.00082 | -0.00356 |
| 8477  | 1887.70 | 123.9 | 3.51 | 0.65  | 0.0451 | 0.0029  | 40.11 | 1.689 | 12.271 | 3.1390 | -0.01157 | 0.02733 | -0.04372 | -0.00369 | 0.00871 | -0.01393 | -0.00079 | -0.00131 | -0.00284 |
| 8478  | 1888.13 | 123.9 | 3.51 | 0.65  | 0.0451 | 0.0057  | 40.24 | 1.689 | 12.393 | 3.1400 | -0.01261 | 0.02606 | -0.04400 | -0.00402 | 0.00830 | -0.01401 | -0.00112 | -0.00172 | -0.00293 |
| 8479  | 1888.27 | 123.9 | 3.51 | 0.65  | 0.0458 | 0.0061  | 40.36 | 1.689 | 12.523 | 3.1412 | -0.01162 | 0.02391 | -0.04410 | -0.00370 | 0.00761 | -0.01404 | -0.00081 | -0.00240 | -0.00295 |
| 8480  | 1887.98 | 123.9 | 3.51 | 0.65  | 0.0468 | 0.0038  | 40.49 | 1.689 | 12.645 | 3.1400 | -0.01210 | 0.02282 | -0.04451 | -0.00385 | 0.00727 | -0.01418 | -0.00096 | -0.00275 | -0.00309 |
| 8481  | 1887.84 | 124.1 | 3.51 | 0.65  | 0.0423 | 0.0079  | 40.61 | 1.689 | 12.772 | 3.1401 | -0.01265 | 0.02286 | -0.04152 | -0.00403 | 0.00728 | -0.01322 | -0.00114 | -0.00274 | -0.00213 |
| 8482  | 1887.84 | 124.1 | 3.51 | 0.65  | 0.0454 | 0.0049  | 40.74 | 1.689 | 12.893 | 3.1395 | -0.01491 | 0.02057 | -0.04237 | -0.00475 | 0.00655 | -0.01350 | -0.00186 | -0.00346 | -0.00241 |
| 8483  | 1887.70 | 124.1 | 3.51 | 0.66  | 0.0492 | 0.0014  | 40.86 | 1.689 | 13.013 | 3.1392 | -0.01544 | 0.01962 | -0.04262 | -0.00492 | 0.00625 | -0.01358 | -0.00202 | -0.00377 | -0.00249 |
| 8484  | 1887.70 | 124.1 | 3.51 | 0.65  | 0.0444 | 0.0072  | 40.99 | 1.688 | 13.151 | 3.1390 | -0.01626 | 0.01930 | -0.04053 | -0.00518 | 0.00615 | -0.01291 | -0.00229 | -0.00387 | -0.00182 |
| 8485  | 1888.13 | 124.1 | 3.51 | 0.65  | 0.0465 | 0.0055  | 41.11 | 1.689 | 13.271 | 3.1391 | -0.01692 | 0.02062 | -0.04118 | -0.00539 | 0.00657 | -0.01312 | -0.00250 | -0.00345 | -0.00203 |
| 8486  | 1888.27 | 124.1 | 3.51 | 0.65  | 0.0478 | 0.0025  | 41.23 | 1.689 | 13.390 | 3.1401 | -0.01847 | 0.02373 | -0.04239 | -0.00588 | 0.00756 | -0.01350 | -0.00299 | -0.00246 | -0.00241 |
| 8487  | 1888.13 | 124.2 | 3.51 | 0.65  | 0.0461 | 0.0072  | 41.36 | 1.688 | 13.524 | 3.1401 | -0.01611 | 0.02505 | -0.04096 | -0.00513 | 0.00798 | -0.01304 | -0.00224 | -0.00204 | -0.00195 |
| 8488  | 1887.98 | 124.1 | 3.51 | 0.65  | 0.0451 | 0.0085  | 41.49 | 1.689 | 13.645 | 3.1400 | -0.01249 | 0.02880 | -0.04096 | -0.00398 | 0.00917 | -0.01304 | -0.00108 | -0.00085 | -0.00196 |
| 8489  | 1887.98 | 124.1 | 3.51 | 0.65  | 0.0489 | 0.0050  | 41.61 | 1.689 | 13.764 | 3.1397 | -0.00965 | 0.02857 | -0.04087 | -0.00307 | 0.00910 | -0.01302 | -0.00018 | -0.00092 | -0.00193 |
| 8490  | 1887.70 | 124.1 | 3.51 | 0.65  | 0.0441 | 0.0088  | 41.74 | 1.689 | 13.899 | 3.1400 | -0.00905 | 0.02732 | -0.04375 | -0.00288 | 0.00870 | -0.01393 | 0.00001  | -0.00132 | -0.00284 |
| 8491  | 1887.84 | 124.1 | 3.51 | 0.65  | 0.0434 | 0.0094  | 41.86 | 1.689 | 14.022 | 3.1389 | -0.00957 | 0.02594 | -0.04111 | -0.00305 | 0.00827 | -0.01310 | -0.00016 | -0.00175 | -0.00201 |
| 8492  | 1888.13 | 124.0 | 3.51 | 0.66  | 0.0461 | 0.0053  | 41.99 | 1.689 | 14.135 | 3.1393 | -0.01139 | 0.02293 | -0.04269 | -0.00363 | 0.00730 | -0.01360 | -0.00074 | -0.00271 | -0.00251 |
| 8493  | 1887.84 | 124.1 | 3.51 | 0.65  | 0.0485 | 0.0010  | 42.11 | 1.689 | 14.266 | 3.1392 | -0.01427 | 0.02166 | -0.04488 | -0.00454 | 0.00690 | -0.01430 | -0.00165 | -0.00312 | -0.00321 |
| 8494  | 1888.27 | 123.9 | 3.51 | 0.66  | 0.0458 | 0.0033  | 42.23 | 1.689 | 14.387 | 3.1398 | -0.01804 | 0.02518 | -0.04525 | -0.00575 | 0.00802 | -0.01441 | -0.00285 | -0.00200 | -0.00332 |
| 8495  | 1888.13 | 124.1 | 3.51 | 0.66  | 0.0468 | 0.0029  | 42.36 | 1.689 | 14.513 | 3.1395 | -0.01554 | 0.03076 | -0.04245 | -0.00495 | 0.00980 | -0.01352 | -0.00206 | -0.00022 | -0.00243 |
| 8496  | 1888.13 | 124.1 | 3.51 | 0.64  | 0.0437 | 0.0012  | 42.48 | 1.688 | 14.650 | 3.1399 | -0.01053 | 0.03238 | -0.03858 | -0.00335 | 0.01031 | -0.01229 | -0.00046 | 0.00030  | -0.00120 |
| 8497  | 1888.42 | 124.0 | 3.51 | 0.66  | 0.0465 | -0.0029 | 42.61 | 1.689 | 14.764 | 3.1398 | -0.00747 | 0.03379 | -0.03523 | -0.00238 | 0.01076 | -0.01122 | 0.00051  | 0.00075  | -0.00013 |
| 8498  | 1887.70 | 123.9 | 3.51 | 0.65  | 0.0458 | -0.0014 | 42.73 | 1.689 | 14.893 | 3.1382 | -0.00621 | 0.03409 | -0.03506 | -0.00198 | 0.01086 | -0.01117 | 0.00091  | 0.00085  | -0.00008 |
| 8499  | 1888.56 | 124.0 | 3.51 | 0.65  | 0.0461 | -0.0003 | 42.86 | 1.689 | 15.017 | 3.1401 | -0.00745 | 0.03482 | -0.03572 | -0.00237 | 0.01109 | -0.01138 | 0.00052  | 0.00107  | -0.00029 |
| 8500  | 1887.98 | 123.9 | 3.51 | 0.65  | 0.0441 | 0.0014  | 42.99 | 1.689 | 15.148 | 3.1402 | -0.00606 | 0.03249 | -0.04021 | -0.00193 | 0.01034 | -0.01280 | 0.00096  | 0.00033  | -0.00172 |
| 8501  | 1888.13 | 123.9 | 3.51 | 0.66  | 0.0472 | -0.0006 | 43.11 | 1.689 | 15.268 | 3.1392 | -0.00609 | 0.03321 | -0.04157 | -0.00194 | 0.01058 | -0.01324 | 0.00095  | 0.00056  | -0.00215 |
| 8502  | 1887.70 | 124.0 | 3.51 | 0.65  | 0.0437 | -0.0025 | 43.24 | 1.688 | 15.399 | 3.1394 | -0.00887 | 0.03017 | -0.04235 | -0.00283 | 0.00961 | -0.01349 | 0.00007  | -0.00041 | -0.00240 |
| 8503  | 1888.13 | 123.7 | 3.51 | 0.66  | 0.0468 | -0.0008 | 43.36 | 1.689 | 15.514 | 3.1407 | -0.00816 | 0.03009 | -0.04401 | -0.00260 | 0.00958 | -0.01401 | 0.00030  | -0.00044 | -0.00292 |
| 8504  | 1888.13 | 123.9 | 3.51 | 0.66  | 0.0454 | 0.0012  | 43.49 | 1.689 | 15.642 | 3.1403 | -0.00892 | 0.03100 | -0.03810 | -0.00284 | 0.00987 | -0.01213 | 0.00005  | -0.00015 | -0.00104 |
| 8505  | 1888.27 | 124.1 | 3.51 | 0.65  | 0.0451 | 0.0029  | 43.61 | 1.689 | 15.769 | 3.1400 | -0.00788 | 0.02977 | -0.03424 | -0.00251 | 0.00948 | -0.01090 | 0.00038  | -0.00053 | 0.00018  |
| 8506  | 1887.70 | 124.2 | 3.51 | 0.66  | 0.0475 | -0.0005 | 43.73 | 1.689 | 15.883 | 3.1401 | -0.00911 | 0.03010 | -0.03414 | -0.00290 | 0.00959 | -0.01087 | -0.00001 | -0.00043 | 0.00022  |
| 8507  | 1887.98 | 124.3 | 3.51 | 0.67  | 0.0461 | 0.0016  | 43.86 | 1.689 | 16.007 | 3.1404 | -0.00901 | 0.03066 | -0.03267 | -0.00287 | 0.00976 | -0.01040 | 0.00002  | -0.00025 | 0.00068  |
| 8508  | 1887.98 | 124.2 | 3.51 | 0.65  | 0.0424 | 0.0032  | 43.99 | 1.688 | 16.148 | 3.1393 | -0.00953 | 0.03061 | -0.03038 | -0.00303 | 0.00975 | -0.00968 | -0.00014 | -0.00026 | 0.00141  |
| 8509  | 1887.70 | 124.0 | 3.51 | 0.66  | 0.0420 | 0.0040  | 44.11 | 1.689 | 16.267 | 3.1390 | -0.00990 | 0.03127 | -0.03050 | -0.00315 | 0.00996 | -0.00972 | -0.00026 | -0.00005 | 0.00137  |
| 8510  | 1887.98 | 124.1 | 3.51 | 0.66  | 0.0444 | 0.0034  | 44.24 | 1.689 | 16.384 | 3.1398 | -0.00985 | 0.03101 | -0.03183 | -0.00314 | 0.00988 | -0.01014 | -0.00024 | -0.00014 | 0.00095  |
| 8511  | 1887.84 | 124.2 | 3.51 | 0.65  | 0.0434 | 0.0029  | 44.36 | 1.689 | 16.520 | 3.1397 | -0.00937 | 0.03104 | -0.03267 | -0.00298 | 0.00989 | -0.01041 | -0.00009 | -0.00013 | 0.00068  |
| 8512  | 1887.70 | 124.2 | 3.51 | 0.65  | 0.0413 | 0.0027  | 44.49 | 1.688 | 16.653 | 3.1391 | -0.00882 | 0.03066 | -0.03252 | -0.00281 | 0.00977 | -0.01036 | 0.00008  | -0.00025 | 0.00073  |
| 8513  | 1887.98 | 124.0 | 3.51 | 0.66  | 0.0448 | 0.0018  | 44.61 | 1.689 | 16.764 | 3.1395 | -0.00889 | 0.03062 | -0.03279 | -0.00283 | 0.00975 | -0.01044 | 0.00006  | -0.00026 | 0.00064  |
| 8514  | 1888.13 | 124.0 | 3.51 | 0.66  | 0.0451 | 0.0010  | 44.73 | 1.689 | 16.890 | 3.1385 | -0.00741 | 0.03333 | -0.03129 | -0.00236 | 0.01062 | -0.00997 | 0.00053  | 0.00060  | 0.00112  |
| 8515  | 1888.13 | 124.2 | 3.51 | 0.66  | 0.0448 | -0.0020 | 44.86 | 1.689 | 17.012 | 3.1396 | -0.00957 | 0.03113 | -0.03247 | -0.00305 | 0.00992 | -0.01034 | -0.00016 | -0.00010 | 0.00075  |
| 8516  | 1887.84 | 124.1 | 3.51 | 0.66  | 0.0444 | 0.0044  | 44.99 | 1.689 | 17.135 | 3.1387 | -0.00816 | 0.03345 | -0.03441 | -0.00260 | 0.01066 | -0.01096 | 0.00029  | 0.00064  | 0.00013  |
| 8517  | 1887.98 | 124.3 | 3.51 | 0.66  | 0.0444 | 0.0006  | 45.11 | 1.689 | 17.261 | 3.1383 | -0.00808 | 0.03212 | -0.03286 | -0.00258 | 0.01024 | -0.01047 | 0.00032  | 0.00022  | 0.00062  |
| 8518  | 1887.84 | 124.3 | 3.51 | 0.66  | 0.0451 | 0.0020  | 45.24 | 1.689 | 17.384 | 3.1390 | -0.00972 | 0.03172 | -0.03402 | -0.00310 | 0.01010 | -0.01084 | -0.00020 | 0.00009  | 0.00025  |
| 8519  | 1888.13 | 124.4 | 3.51 | 0.66  | 0.0417 | 0.0029  | 45.36 | 1.689 | 17.516 | 3.1402 | -0.00970 | 0.03020 | -0.03623 | -0.00309 | 0.00962 | -0.01154 | -0.00020 | -0.00040 | -0.00045 |
| 8520  | 1888.13 | 124.7 | 3.50 | 0.67  | 0.0448 | 0.0008  | 45.49 | 1.690 | 17.630 | 3.1398 | -0.00904 | 0.03098 | -0.03441 | -0.00288 | 0.00987 | -0.01096 | 0.00001  | -0.00015 | 0.00013  |
| 8521  | 1887.84 | 124.8 | 3.50 | 0.67  | 0.0472 | 0.0031  | 45.61 | 1.690 | 17.757 | 3.1378 | -0.00917 | 0.03307 | -0.03288 | -0.00292 | 0.01054 | -0.01048 | -0.00003 | 0.00052  | 0.00061  |
| 8522  | 1887.98 | 125.0 | 3.50 | 0.66  | 0.0413 | 0.0083  | 45.74 | 1.689 | 17.889 | 3.1392 | -0.00851 | 0.03229 | -0.03310 | -0.00271 | 0.01029 | -0.01054 | 0.00018  | 0.00027  | 0.00054  |
| 8523  | 1887.55 | 125.0 | 3.50 | 0.66  | 0.0434 | 0.0019  | 45.86 | 1.689 | 18.013 | 3.1395 | -0.00910 | 0.03073 | -0.03347 | -0.00290 | 0.00979 | -0.01066 | -0.00001 | -0.00023 | 0.00043  |
| 8524  | 1887.70 | 125.0 | 3.50 | 0.66  | 0.0417 | 0.0075  | 45.99 | 1.689 | 18.141 | 3.1383 | -0.00821 | 0.03138 | -0.03389 | -0.00262 | 0.01000 | -0.01080 | 0.00028  | -0.00002 | 0.00029  |

Table A9. Run 139.

Run = 139

M = 1.60

xsppos = 39.853

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc   | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|---------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 8525  | 1887.84 | 124.2 | 3.51 | 0.65  | 0.0465 | 0.0008  | 12.98 | 1.189 | -6.619 | 3.1393 | 0.00308  | -0.02223 | -0.03542 | 0.00098  | -0.00708 | -0.01128 | 0.00029  | -0.00026 | -0.00001 |
| 8526  | 1888.13 | 124.1 | 3.51 | 0.65  | 0.0451 | 0.0010  | 12.98 | 1.189 | -6.617 | 3.1395 | 0.00234  | -0.02138 | -0.03601 | 0.00075  | -0.00681 | -0.01147 | 0.00005  | 0.00001  | -0.00020 |
| 8527  | 1887.98 | 124.1 | 3.51 | 0.65  | 0.0434 | 0.0038  | 12.98 | 1.188 | -6.614 | 3.1386 | 0.00168  | -0.02106 | -0.03554 | 0.00054  | -0.00671 | -0.01132 | -0.00016 | 0.00011  | -0.00005 |
| 8528  | 1887.41 | 124.2 | 3.51 | 0.65  | 0.0437 | 0.0040  | 12.98 | 1.188 | -6.615 | 3.1383 | 0.00155  | -0.02090 | -0.03500 | 0.00049  | -0.00666 | -0.01115 | -0.00020 | 0.00016  | 0.00012  |
| 8529  | 1888.42 | 124.1 | 3.51 | 0.66  | 0.0489 | -0.0025 | 12.98 | 1.189 | -6.624 | 3.1402 | 0.00223  | -0.02146 | -0.03493 | 0.00071  | -0.00683 | -0.01112 | 0.00002  | -0.00001 | 0.00015  |
| 8530  | 1888.70 | 124.0 | 3.51 | 0.66  | 0.0476 | -0.0695 | 12.99 | 0.488 | 4.954  | 3.1398 | 0.02484  | 0.01150  | -0.01263 | 0.00791  | 0.00366  | -0.00402 | 0.00722  | 0.01048  | 0.00725  |
| 8531  | 1887.12 | 124.0 | 3.51 | 0.66  | 0.0476 | -0.0668 | 13.12 | 0.488 | 5.074  | 3.1383 | 0.02222  | 0.01298  | -0.01560 | 0.00708  | 0.00414  | -0.00497 | 0.00639  | 0.01096  | 0.00630  |
| 8532  | 1888.27 | 123.4 | 3.51 | 0.67  | 0.0469 | -0.0699 | 13.12 | 0.488 | 5.071  | 3.1394 | 0.02195  | 0.01313  | -0.01379 | 0.00699  | 0.00418  | -0.00439 | 0.00630  | 0.01100  | 0.00688  |
| 8533  | 1887.84 | 123.8 | 3.51 | 0.67  | 0.0497 | -0.0693 | 13.24 | 0.488 | 5.192  | 3.1382 | 0.01987  | 0.01401  | -0.01546 | 0.00633  | 0.00447  | -0.00493 | 0.00564  | 0.01128  | 0.00634  |
| 8534  | 1887.98 | 123.7 | 3.51 | 0.66  | 0.0452 | -0.0606 | 13.37 | 0.488 | 5.328  | 3.1402 | 0.01728  | 0.00959  | -0.01824 | 0.00550  | 0.00305  | -0.00581 | 0.00481  | 0.00987  | 0.00546  |
| 8535  | 1888.13 | 123.6 | 3.51 | 0.65  | 0.0424 | -0.0518 | 13.49 | 0.487 | 5.461  | 3.1396 | 0.02353  | 0.00641  | -0.01848 | 0.00750  | 0.00204  | -0.00589 | 0.00680  | 0.00886  | 0.00539  |
| 8536  | 1887.55 | 123.5 | 3.51 | 0.67  | 0.0466 | -0.0533 | 13.62 | 0.488 | 5.571  | 3.1370 | 0.02826  | 0.00873  | -0.01758 | 0.00901  | 0.00278  | -0.00560 | 0.00831  | 0.00960  | 0.00567  |
| 8537  | 1888.42 | 123.4 | 3.51 | 0.67  | 0.0410 | -0.0442 | 13.74 | 0.488 | 5.703  | 3.1395 | 0.03322  | 0.00881  | -0.01987 | 0.01058  | 0.00281  | -0.00633 | 0.00989  | 0.00963  | 0.00494  |
| 8538  | 1887.98 | 123.5 | 3.51 | 0.66  | 0.0452 | -0.0503 | 13.87 | 0.488 | 5.828  | 3.1391 | 0.03561  | 0.00875  | -0.01995 | 0.01134  | 0.00279  | -0.00636 | 0.01065  | 0.00961  | 0.00491  |
| 8539  | 1887.84 | 123.5 | 3.51 | 0.65  | 0.0428 | -0.0386 | 13.99 | 0.487 | 5.962  | 3.1393 | 0.03460  | 0.00498  | -0.01972 | 0.01102  | 0.00159  | -0.00628 | 0.01033  | 0.00840  | 0.00499  |
| 8540  | 1887.55 | 123.6 | 3.51 | 0.66  | 0.0414 | -0.0319 | 14.12 | 0.487 | 6.085  | 3.1386 | 0.03085  | 0.00511  | -0.01979 | 0.00983  | 0.00163  | -0.00631 | 0.00914  | 0.00845  | 0.00496  |
| 8541  | 1887.98 | 123.6 | 3.51 | 0.65  | 0.0362 | -0.0207 | 14.24 | 0.486 | 6.220  | 3.1395 | 0.02749  | 0.01197  | -0.02055 | 0.00876  | 0.00381  | -0.00655 | 0.00806  | 0.01063  | 0.00473  |
| 8542  | 1888.13 | 123.7 | 3.51 | 0.65  | 0.0403 | -0.0221 | 14.36 | 0.487 | 6.341  | 3.1396 | 0.02823  | 0.01704  | -0.02019 | 0.00899  | 0.00543  | -0.00643 | 0.00830  | 0.01225  | 0.00484  |
| 8543  | 1887.98 | 123.8 | 3.51 | 0.66  | 0.0386 | -0.0212 | 14.49 | 0.487 | 6.462  | 3.1392 | 0.02741  | 0.01706  | -0.01880 | 0.00873  | 0.00543  | -0.00599 | 0.00804  | 0.01225  | 0.00528  |
| 8544  | 1887.98 | 123.7 | 3.51 | 0.65  | 0.0334 | -0.0035 | 14.62 | 0.486 | 6.598  | 3.1397 | 0.02902  | 0.01724  | -0.01770 | 0.00924  | 0.00549  | -0.00564 | 0.00855  | 0.01231  | 0.00563  |
| 8545  | 1888.13 | 123.8 | 3.51 | 0.66  | 0.0376 | -0.0041 | 14.74 | 0.487 | 6.712  | 3.1398 | 0.03401  | 0.01913  | -0.02028 | 0.01083  | 0.00609  | -0.00646 | 0.01014  | 0.01291  | 0.00481  |
| 8546  | 1887.98 | 123.8 | 3.51 | 0.66  | 0.0382 | -0.0056 | 14.87 | 0.487 | 6.837  | 3.1389 | 0.03487  | 0.02082  | -0.01603 | 0.01111  | 0.00663  | -0.00511 | 0.01042  | 0.01345  | 0.00616  |
| 8547  | 1887.98 | 123.9 | 3.51 | 0.66  | 0.0355 | 0.0023  | 14.99 | 0.487 | 6.964  | 3.1390 | 0.03333  | 0.02426  | -0.01304 | 0.01062  | 0.00773  | -0.00415 | 0.00992  | 0.01455  | 0.00712  |
| 8548  | 1887.98 | 123.9 | 3.51 | 0.66  | 0.0393 | 0.0006  | 15.11 | 0.487 | 7.084  | 3.1385 | 0.03925  | 0.03002  | -0.01416 | 0.01250  | 0.00957  | -0.00451 | 0.01181  | 0.01638  | 0.00676  |
| 8549  | 1888.13 | 123.8 | 3.51 | 0.66  | 0.0358 | 0.0099  | 15.24 | 0.487 | 7.211  | 3.1395 | 0.04217  | 0.02711  | -0.01461 | 0.01343  | 0.00863  | -0.00465 | 0.01274  | 0.01545  | 0.00662  |
| 8550  | 1887.70 | 123.6 | 3.51 | 0.66  | 0.0386 | 0.0030  | 15.37 | 0.487 | 7.335  | 3.1389 | 0.04122  | 0.02743  | -0.01639 | 0.01313  | 0.00874  | -0.00522 | 0.01244  | 0.01556  | 0.00605  |
| 8551  | 1887.98 | 123.5 | 3.51 | 0.66  | 0.0396 | 0.0064  | 15.49 | 0.487 | 7.459  | 3.1404 | 0.04008  | 0.02806  | -0.01764 | 0.01276  | 0.00893  | -0.00562 | 0.01207  | 0.01575  | 0.00565  |
| 8552  | 1888.13 | 123.5 | 3.51 | 0.66  | 0.0389 | 0.0116  | 15.62 | 0.487 | 7.588  | 3.1402 | 0.04189  | 0.03152  | -0.01572 | 0.01334  | 0.01004  | -0.00501 | 0.01265  | 0.01686  | 0.00626  |
| 8553  | 1887.84 | 123.5 | 3.51 | 0.66  | 0.0358 | 0.0174  | 15.74 | 0.487 | 7.712  | 3.1389 | 0.04211  | 0.03246  | -0.01473 | 0.01342  | 0.01034  | -0.00469 | 0.01272  | 0.01716  | 0.00658  |
| 8554  | 1887.98 | 123.5 | 3.51 | 0.66  | 0.0396 | 0.0139  | 15.87 | 0.487 | 7.836  | 3.1387 | 0.04364  | 0.03271  | -0.01621 | 0.01390  | 0.01042  | -0.00517 | 0.01321  | 0.01724  | 0.00611  |
| 8555  | 1887.98 | 123.6 | 3.51 | 0.66  | 0.0392 | 0.0155  | 15.99 | 0.487 | 7.960  | 3.1402 | 0.04116  | 0.02386  | -0.01032 | 0.01311  | 0.00760  | -0.00329 | 0.01241  | 0.01442  | 0.00799  |
| 8556  | 1887.84 | 123.8 | 3.51 | 0.66  | 0.0368 | 0.0226  | 16.11 | 0.487 | 8.087  | 3.1391 | 0.04246  | 0.01591  | -0.00440 | 0.01353  | 0.00507  | -0.00140 | 0.01283  | 0.01189  | 0.00987  |
| 8557  | 1887.98 | 123.7 | 3.51 | 0.66  | 0.0375 | 0.0230  | 16.24 | 0.487 | 8.207  | 3.1396 | 0.04153  | 0.01142  | -0.00286 | 0.01323  | 0.00364  | -0.00091 | 0.01254  | 0.01046  | 0.01036  |
| 8558  | 1887.98 | 123.6 | 3.51 | 0.66  | 0.0358 | 0.0248  | 16.37 | 0.487 | 8.339  | 3.1390 | 0.04562  | 0.00778  | -0.00576 | 0.01453  | 0.00248  | -0.00184 | 0.01384  | 0.00930  | 0.00944  |
| 8559  | 1887.98 | 123.6 | 3.51 | 0.66  | 0.0396 | 0.0213  | 16.49 | 0.487 | 8.459  | 3.1400 | 0.04651  | 0.00837  | -0.00634 | 0.01481  | 0.00266  | -0.00202 | 0.01412  | 0.00948  | 0.00925  |
| 8560  | 1887.70 | 123.5 | 3.51 | 0.65  | 0.0341 | 0.0267  | 16.62 | 0.486 | 8.595  | 3.1389 | 0.04084  | 0.00446  | -0.00281 | 0.01301  | 0.00142  | -0.00090 | 0.01232  | 0.00824  | 0.01037  |
| 8561  | 1888.27 | 123.4 | 3.51 | 0.66  | 0.0403 | 0.0217  | 16.74 | 0.487 | 8.705  | 3.1392 | 0.04044  | 0.00081  | -0.00605 | 0.01288  | 0.00026  | -0.00193 | 0.01219  | 0.00708  | 0.00935  |
| 8562  | 1887.98 | 123.4 | 3.51 | 0.66  | 0.0396 | 0.0176  | 16.86 | 0.487 | 8.832  | 3.1387 | 0.03274  | -0.01319 | -0.00878 | 0.01043  | -0.00420 | -0.00280 | 0.00974  | 0.00262  | 0.00847  |
| 8563  | 1887.98 | 123.4 | 3.51 | 0.66  | 0.0392 | 0.0146  | 16.99 | 0.487 | 8.957  | 3.1389 | 0.02489  | -0.02875 | -0.00768 | 0.00793  | -0.00916 | -0.00245 | 0.00724  | -0.00234 | 0.00883  |
| 8564  | 1887.98 | 123.4 | 3.51 | 0.67  | 0.0386 | 0.0086  | 17.12 | 0.488 | 9.077  | 3.1392 | 0.01705  | -0.05464 | -0.00389 | 0.00543  | -0.01741 | -0.00124 | 0.00474  | -0.01059 | 0.01003  |
| 8565  | 1888.13 | 123.5 | 3.51 | 0.67  | 0.0389 | 0.0097  | 17.24 | 0.488 | 9.197  | 3.1390 | 0.01037  | -0.06354 | -0.00307 | 0.00330  | -0.02024 | -0.00098 | 0.00261  | -0.01342 | 0.01029  |
| 8566  | 1887.70 | 123.5 | 3.51 | 0.67  | 0.0424 | 0.0014  | 17.36 | 0.488 | 9.325  | 3.1388 | 0.00435  | -0.06722 | 0.00266  | 0.00139  | -0.02142 | 0.00085  | 0.00069  | -0.01460 | 0.01212  |
| 8567  | 1887.84 | 123.6 | 3.51 | 0.66  | 0.0430 | -0.0001 | 17.49 | 0.487 | 9.457  | 3.1390 | -0.00885 | -0.06981 | 0.00447  | -0.00282 | -0.02224 | 0.00143  | -0.00351 | -0.01542 | 0.01270  |
| 8568  | 1887.98 | 123.6 | 3.51 | 0.67  | 0.0393 | 0.0043  | 17.61 | 0.488 | 9.576  | 3.1383 | -0.01745 | -0.04560 | 0.00379  | -0.00556 | -0.01453 | 0.00121  | -0.00625 | -0.00771 | 0.01248  |
| 8569  | 1887.98 | 123.7 | 3.51 | 0.66  | 0.0406 | 0.0042  | 17.74 | 0.487 | 9.702  | 3.1383 | -0.02124 | -0.03400 | -0.00037 | -0.00677 | -0.01083 | -0.00012 | -0.00746 | -0.00401 | 0.01115  |
| 8570  | 1888.27 | 123.8 | 3.51 | 0.68  | 0.0437 | -0.0016 | 17.87 | 0.488 | 9.818  | 3.1393 | -0.02943 | -0.03133 | -0.00346 | -0.00937 | -0.00998 | -0.01110 | -0.01007 | -0.00316 | 0.01017  |
| 8571  | 1887.70 | 123.9 | 3.51 | 0.67  | 0.0403 | 0.0049  | 17.99 | 0.488 | 9.952  | 3.1381 | -0.03876 | -0.03350 | -0.00359 | -0.01235 | -0.01067 | -0.00114 | -0.01304 | -0.00386 | 0.01013  |
| 8572  | 1888.42 | 123.9 | 3.51 | 0.67  | 0.0410 | 0.0062  | 18.11 | 0.488 | 10.070 | 3.1393 | -0.04824 | -0.03983 | -0.00202 | -0.01537 | -0.01269 | -0.00064 | -0.01606 | -0.00587 | 0.01063  |
| 8573  | 1887.70 | 124.1 | 3.51 | 0.67  | 0.0406 | 0.0070  | 18.24 | 0.488 | 10.203 | 3.1376 | -0.05603 | -0.04765 | -0.00293 | -0.01786 | -0.01519 | -0.00094 | -0.01855 | -0.00837 | 0.01034  |
| 8574  | 1888.13 | 124.1 | 3.51 | 0.67  | 0.0399 | 0.0038  | 18.37 | 0.487 | 10.330 | 3.1386 | -0.05292 | -0.05605 | -0.00346 | -0.01686 | -0.01786 | -0.00110 | -0.01756 | -0.01104 | 0.01017  |
| 8575  | 1887.98 | 124.2 | 3.51 | 0.66  | 0.0437 | -0.0035 | 18.49 | 0.488 | 10.452 | 3.1380 | -0.03684 | -0.06149 | -0.00595 | -0.01174 | -0.01960 | -0.00190 | -0.01243 | -0.01278 | 0.00938  |
| 8576  | 1888.13 | 124.0 | 3.51 | 0.67  | 0.0424 | 0.0004  | 18.62 | 0.488 | 10.576 | 3.1388 | -0.02879 | -0.06533 | -0.00793 | -0.00917 | -0.02082 | -0.00253 | -0.00987 | -0.01400 | 0.00874  |
| 8577  | 1888.42 | 123.8 | 3.51 | 0.66  | 0.0406 | 0.0060  | 18.74 | 0.487 | 10.706 | 3.1388 | -0.02798 | -0.05866 | -0.01138 | -0.00891 | -0.01869 | -0.00363 | -0.00961 | -0.01187 | 0.00764  |
| 8578  | 1888.27 | 123.9 | 3.51 | 0.66  | 0.0399 | 0.0075  | 18.86 | 0.487 | 10.830 | 3.1384 | -0.      |          |          |          |          |          |          |          |          |

Table A9. Continued.

Run = 139

M = 1.60

xsppos = 39.852

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc   | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|---------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 8598  | 1888.56 | 123.9 | 3.51 | 0.66  | 0.0471 | 0.0022  | 21.37 | 0.488 | 13.328 | 3.1396 | -0.00078 | -0.03983 | -0.04149 | -0.00025 | -0.01269 | -0.01322 | -0.00094 | -0.00587 | -0.00195 |
| 8599  | 1887.70 | 124.0 | 3.51 | 0.66  | 0.0444 | 0.0025  | 21.49 | 0.487 | 13.455 | 3.1377 | -0.00499 | -0.03944 | -0.04218 | -0.00159 | -0.01257 | -0.01344 | -0.00228 | -0.00575 | -0.00217 |
| 8600  | 1888.13 | 124.0 | 3.51 | 0.66  | 0.0465 | 0.0027  | 21.62 | 0.488 | 13.579 | 3.1385 | -0.00932 | -0.03932 | -0.04791 | -0.00297 | -0.01253 | -0.01527 | -0.00366 | -0.00571 | -0.00400 |
| 8601  | 1887.84 | 124.0 | 3.51 | 0.66  | 0.0454 | 0.0012  | 21.74 | 0.487 | 13.706 | 3.1383 | -0.01297 | -0.02969 | -0.05263 | -0.00413 | -0.00946 | -0.01677 | -0.00483 | -0.00264 | -0.00550 |
| 8602  | 1888.13 | 124.1 | 3.51 | 0.65  | 0.0437 | 0.0059  | 21.86 | 0.487 | 13.835 | 3.1394 | -0.01456 | -0.02057 | -0.05043 | -0.00464 | -0.00655 | -0.01606 | -0.00533 | 0.00027  | -0.00479 |
| 8603  | 1888.42 | 124.0 | 3.51 | 0.66  | 0.0458 | 0.0042  | 21.99 | 0.487 | 13.952 | 3.1393 | -0.01542 | -0.01713 | -0.04525 | -0.00491 | -0.00546 | -0.01441 | -0.00561 | 0.00136  | -0.00314 |
| 8604  | 1888.27 | 124.0 | 3.51 | 0.65  | 0.0451 | 0.0029  | 22.11 | 0.487 | 14.082 | 3.1376 | -0.01448 | -0.01892 | -0.02996 | -0.00461 | -0.00603 | -0.00955 | -0.00531 | 0.00079  | 0.00172  |
| 8605  | 1887.70 | 124.0 | 3.51 | 0.65  | 0.0437 | 0.0040  | 22.24 | 0.487 | 14.211 | 3.1376 | -0.01417 | -0.02649 | -0.03011 | -0.00452 | -0.00844 | -0.00960 | -0.00521 | -0.00162 | 0.00167  |
| 8606  | 1887.98 | 124.1 | 3.51 | 0.66  | 0.0444 | 0.0025  | 22.36 | 0.487 | 14.331 | 3.1372 | -0.00932 | -0.03276 | -0.03056 | -0.00297 | -0.01044 | -0.00974 | -0.00366 | -0.00362 | 0.00153  |
| 8607  | 1888.13 | 124.0 | 3.51 | 0.66  | 0.0451 | 0.0029  | 22.49 | 0.487 | 14.454 | 3.1386 | 0.00650  | -0.03853 | -0.03436 | 0.00207  | -0.01228 | -0.01095 | 0.00138  | -0.00546 | 0.00032  |
| 8608  | 1887.84 | 123.9 | 3.51 | 0.66  | 0.0478 | -0.0012 | 22.62 | 0.487 | 14.578 | 3.1373 | 0.01265  | -0.03867 | -0.03415 | 0.00403  | -0.01233 | -0.01088 | 0.00334  | -0.00551 | 0.00039  |
| 8609  | 1888.13 | 123.9 | 3.51 | 0.65  | 0.0458 | 0.0033  | 22.74 | 0.487 | 14.706 | 3.1383 | 0.00935  | -0.02656 | -0.03462 | 0.00298  | -0.00846 | -0.01103 | 0.00228  | -0.00164 | 0.00024  |
| 8610  | 1887.84 | 123.9 | 3.51 | 0.66  | 0.0465 | 0.0027  | 22.87 | 0.487 | 14.829 | 3.1382 | 0.00167  | -0.01855 | -0.03791 | 0.00053  | -0.00591 | -0.01208 | -0.00016 | 0.00091  | -0.00081 |
| 8611  | 1887.26 | 124.2 | 3.51 | 0.66  | 0.0448 | 0.0018  | 22.99 | 0.487 | 14.955 | 3.1365 | -0.00657 | -0.01232 | -0.03848 | -0.00209 | -0.00393 | -0.01227 | -0.00279 | 0.00289  | -0.00100 |
| 8612  | 1888.13 | 124.1 | 3.51 | 0.66  | 0.0475 | -0.0005 | 23.12 | 0.488 | 15.079 | 3.1390 | -0.01721 | -0.01241 | -0.04036 | -0.00548 | -0.00396 | -0.01286 | -0.00618 | 0.00286  | -0.00159 |
| 8613  | 1888.13 | 124.0 | 3.51 | 0.65  | 0.0451 | -0.0027 | 23.24 | 0.487 | 15.210 | 3.1389 | -0.02287 | -0.01091 | -0.04270 | -0.00729 | -0.00348 | -0.01360 | -0.00798 | 0.00334  | -0.00233 |
| 8614  | 1887.84 | 124.0 | 3.51 | 0.66  | 0.0496 | -0.0049 | 23.37 | 0.488 | 15.327 | 3.1382 | -0.01703 | -0.01101 | -0.04514 | -0.00543 | -0.00351 | -0.01438 | -0.00612 | 0.00331  | -0.00311 |
| 8615  | 1888.27 | 123.8 | 3.51 | 0.66  | 0.0451 | 0.0010  | 23.49 | 0.487 | 15.457 | 3.1389 | 0.00683  | -0.01238 | -0.04620 | 0.00218  | -0.00394 | -0.01472 | 0.00148  | 0.00288  | -0.00345 |
| 8616  | 1887.70 | 123.8 | 3.51 | 0.67  | 0.0482 | -0.0122 | 23.61 | 0.488 | 15.567 | 3.1371 | 0.01340  | -0.01363 | -0.04218 | 0.00427  | -0.00434 | -0.01345 | 0.00358  | 0.00247  | -0.00218 |
| 8617  | 1887.84 | 123.8 | 3.51 | 0.65  | 0.0448 | -0.0020 | 23.74 | 0.487 | 15.712 | 3.1380 | 0.01334  | -0.01493 | -0.04321 | 0.00425  | -0.00476 | -0.01377 | 0.00356  | 0.00206  | -0.00250 |
| 8618  | 1888.27 | 123.6 | 3.51 | 0.66  | 0.0448 | -0.0057 | 23.87 | 0.487 | 15.831 | 3.1386 | 0.01094  | -0.01689 | -0.04806 | 0.00348  | -0.00538 | -0.01531 | 0.00279  | 0.00144  | -0.00404 |
| 8619  | 1888.27 | 123.5 | 3.51 | 0.67  | 0.0458 | -0.0042 | 23.99 | 0.488 | 15.947 | 3.1383 | 0.01215  | -0.01846 | -0.05227 | 0.00387  | -0.00588 | -0.01666 | 0.00318  | 0.00094  | -0.00538 |
| 8620  | 1887.98 | 123.8 | 3.51 | 0.66  | 0.0465 | -0.0048 | 24.11 | 0.487 | 16.079 | 3.1371 | 0.01014  | -0.01579 | -0.05524 | 0.00323  | -0.00503 | -0.01761 | 0.00254  | 0.00179  | -0.00634 |
| 8621  | 1888.27 | 123.9 | 3.51 | 0.66  | 0.0468 | -0.0018 | 24.24 | 0.488 | 16.202 | 3.1395 | 0.00770  | -0.01896 | -0.06033 | 0.00245  | -0.00604 | -0.01922 | 0.00176  | 0.00078  | -0.00794 |
| 8622  | 1887.84 | 124.1 | 3.51 | 0.66  | 0.0458 | -0.0042 | 24.36 | 0.488 | 16.322 | 3.1382 | 0.00849  | -0.01838 | -0.05640 | 0.00270  | -0.00586 | -0.01797 | 0.00201  | 0.00096  | -0.00670 |
| 8623  | 1887.55 | 124.1 | 3.51 | 0.65  | 0.0458 | -0.0033 | 24.49 | 0.487 | 16.457 | 3.1373 | 0.00741  | -0.01888 | -0.05947 | 0.00236  | -0.00602 | -0.01896 | 0.00167  | 0.00080  | -0.00768 |
| 8624  | 1888.42 | 123.9 | 3.51 | 0.66  | 0.0472 | -0.0044 | 24.61 | 0.488 | 16.574 | 3.1375 | 0.00762  | -0.01725 | -0.05514 | 0.00243  | -0.00550 | -0.01757 | 0.00174  | 0.00132  | -0.00630 |
| 8625  | 1888.13 | 123.7 | 3.51 | 0.66  | 0.0475 | -0.0051 | 24.74 | 0.487 | 16.704 | 3.1384 | 0.00582  | -0.01735 | -0.03265 | 0.00185  | -0.00553 | -0.01040 | 0.00116  | 0.00129  | 0.00087  |
| 8626  | 1887.98 | 123.8 | 3.51 | 0.66  | 0.0424 | -0.0024 | 24.87 | 0.487 | 16.835 | 3.1384 | 0.00423  | -0.01808 | -0.01973 | 0.00135  | -0.00576 | -0.00629 | 0.00065  | 0.00106  | 0.00498  |
| 8627  | 1887.98 | 123.9 | 3.51 | 0.65  | 0.0413 | 0.0036  | 24.99 | 0.487 | 16.963 | 3.1374 | 0.00611  | -0.01643 | -0.02145 | 0.00195  | -0.00524 | -0.00684 | 0.00125  | 0.00158  | 0.00444  |
| 8628  | 1888.27 | 123.8 | 3.51 | 0.66  | 0.0489 | -0.0016 | 25.11 | 0.488 | 17.071 | 3.1385 | 0.00601  | -0.01717 | -0.02950 | 0.00191  | -0.00547 | -0.00940 | 0.00122  | 0.00135  | 0.00187  |
| 8629  | 1887.84 | 123.9 | 3.51 | 0.65  | 0.0458 | -0.0014 | 25.24 | 0.487 | 17.209 | 3.1377 | 0.00647  | -0.01801 | -0.03899 | 0.00206  | -0.00574 | -0.01243 | 0.00137  | 0.00108  | -0.00116 |
| 8630  | 1887.84 | 123.8 | 3.51 | 0.65  | 0.0434 | 0.0047  | 25.37 | 0.487 | 17.337 | 3.1375 | 0.00556  | -0.01723 | -0.05041 | 0.00177  | -0.00549 | -0.01607 | 0.00108  | 0.00133  | -0.00480 |
| 8631  | 1888.13 | 123.8 | 3.51 | 0.65  | 0.0444 | -0.0031 | 25.49 | 0.487 | 17.463 | 3.1387 | 0.00455  | -0.01833 | -0.05556 | 0.00145  | -0.00584 | -0.01770 | 0.00076  | 0.00098  | -0.00643 |
| 8632  | 1887.84 | 123.9 | 3.51 | 0.65  | 0.0417 | 0.0038  | 25.61 | 0.487 | 17.589 | 3.1383 | 0.00576  | -0.01910 | -0.05243 | 0.00183  | -0.00609 | -0.01671 | 0.00114  | 0.00073  | -0.00544 |
| 8633  | 1888.13 | 123.9 | 3.51 | 0.66  | 0.0454 | -0.0016 | 25.74 | 0.487 | 17.703 | 3.1387 | 0.00769  | -0.01803 | -0.03689 | 0.00245  | -0.00574 | -0.01175 | 0.00176  | 0.00107  | -0.00048 |
| 8634  | 1888.27 | 124.0 | 3.51 | 0.65  | 0.0434 | 0.0010  | 25.86 | 0.487 | 17.835 | 3.1380 | 0.00773  | -0.01707 | -0.02311 | 0.00246  | -0.00544 | -0.00737 | 0.00177  | 0.00138  | -0.00391 |
| 8635  | 1887.84 | 124.1 | 3.51 | 0.66  | 0.0468 | -0.0055 | 25.99 | 0.488 | 17.953 | 3.1371 | 0.00763  | -0.01695 | -0.02307 | 0.00243  | -0.00540 | -0.00735 | 0.00174  | 0.00141  | 0.00392  |
| 8636  | 1887.70 | 124.0 | 3.51 | 0.65  | 0.0420 | 0.0021  | 26.12 | 0.487 | 18.090 | 3.1373 | 0.00587  | -0.01888 | -0.02484 | 0.00187  | -0.00602 | -0.00792 | 0.00118  | 0.00080  | 0.00335  |
| 8637  | 1887.98 | 123.8 | 3.51 | 0.65  | 0.0448 | -0.0057 | 26.24 | 0.487 | 18.210 | 3.1395 | 0.00496  | -0.01811 | -0.02892 | 0.00158  | -0.00577 | -0.00921 | 0.00089  | 0.00105  | 0.00206  |
| 8638  | 1888.13 | 123.8 | 3.51 | 0.65  | 0.0413 | 0.0017  | 26.37 | 0.487 | 18.341 | 3.1385 | 0.00551  | -0.01694 | -0.03001 | 0.00175  | -0.00540 | -0.00956 | 0.00106  | 0.00142  | 0.00171  |
| 8639  | 1887.84 | 123.8 | 3.51 | 0.65  | 0.0451 | -0.0055 | 26.49 | 0.487 | 18.462 | 3.1377 | 0.00653  | -0.01779 | -0.03208 | 0.00208  | -0.00567 | -0.01022 | 0.00139  | 0.00115  | 0.00105  |
| 8640  | 1887.98 | 124.1 | 3.51 | 0.65  | 0.0434 | -0.0027 | 26.62 | 0.487 | 18.588 | 3.1378 | 0.00584  | -0.01671 | -0.03154 | 0.00186  | -0.00533 | -0.01005 | 0.00117  | 0.00149  | 0.00122  |
| 8641  | 1888.13 | 124.0 | 3.51 | 0.64  | 0.0410 | 0.0006  | 26.74 | 0.487 | 18.722 | 3.1389 | 0.00536  | -0.01783 | -0.03302 | 0.00171  | -0.00568 | -0.01052 | 0.00102  | 0.00114  | 0.00075  |
| 8642  | 1887.98 | 124.0 | 3.51 | 0.65  | 0.0413 | -0.0029 | 26.87 | 0.487 | 18.840 | 3.1386 | 0.00560  | -0.01663 | -0.03486 | 0.00179  | -0.00530 | -0.01111 | 0.00109  | 0.00152  | 0.00016  |
| 8643  | 1887.98 | 124.0 | 3.51 | 0.64  | 0.0376 | -0.0022 | 26.99 | 0.486 | 18.974 | 3.1384 | 0.00497  | -0.01571 | -0.03601 | 0.00158  | -0.00500 | -0.01147 | 0.00089  | 0.00181  | -0.00020 |
| 8644  | 1888.13 | 123.9 | 3.51 | 0.64  | 0.0358 | 0.0043  | 27.12 | 0.486 | 19.104 | 3.1385 | 0.00596  | -0.01563 | -0.03575 | 0.00190  | -0.00498 | -0.01139 | 0.00120  | 0.00184  | -0.00012 |
| 8645  | 1888.13 | 124.0 | 3.51 | 0.64  | 0.0345 | 0.0017  | 27.24 | 0.486 | 19.230 | 3.1377 | 0.00711  | -0.01311 | -0.03641 | 0.00226  | -0.00418 | -0.01160 | 0.00157  | 0.00264  | -0.00033 |
| 8646  | 1888.27 | 124.1 | 3.51 | 0.64  | 0.0334 | 0.0058  | 27.36 | 0.486 | 19.354 | 3.1386 | 0.00518  | -0.01240 | -0.03617 | 0.00165  | -0.00395 | -0.01152 | 0.00096  | 0.00287  | -0.00025 |
| 8647  | 1888.13 | 124.1 | 3.51 | 0.64  | 0.0372 | 0.0013  | 27.49 | 0.486 | 19.474 | 3.1384 | 0.00650  | -0.01166 | -0.03543 | 0.00207  | -0.00372 | -0.01129 | 0.00138  | 0.00310  | -0.00002 |
| 8648  | 1887.98 | 123.9 | 3.51 | 0.64  | 0.0362 | 0.0008  | 27.62 | 0.486 | 19.602 | 3.1373 | 0.00813  | -0.01265 | -0.03367 | 0.00259  | -0.00403 | -0.01073 | 0.00190  | 0.00279  | 0.00054  |
| 8649  | 1888.13 | 123.9 | 3.51 | 0.64  | 0.0365 | -0.0028 | 27.74 | 0.486 | 19.729 | 3.1389 | 0.00661  | -0.01455 | -0.03483 | 0.00211  | -0.00463 | -0.01110 | 0.00141  | 0.00218  | 0.00018  |
| 8650  | 1887.98 | 123.9 | 3.51 | 0.64  | 0.0345 | 0.0054  | 27.86 | 0.486 | 19.854 | 3.1387 | 0.00978  | -0.01681 | -0.03503 | 0.00312  | -0.00536 | -0.01116 | 0.00242  | 0.00146  | 0.00011  |
| 8651  | 1887.70 | 124.0 | 3.51 | 0.63  | 0.0297 | 0.0130  | 2     |       |        |        |          |          |          |          |          |          |          |          |          |



Table A9. Continued.

Run = 139

M = 1.60

xsppos = 39.852

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc   | x     | h/L   | xhbeta | pref   | dp01    | dp02     | dp03     | dpp01   | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|---------|-------|-------|--------|--------|---------|----------|----------|---------|----------|----------|----------|----------|----------|
| 8671  | 1887.70 | 123.9 | 3.51 | 0.65  | 0.0420 | 0.0040  | 30.49 | 0.487 | 22.465 | 3.1390 | 0.00243 | -0.00827 | -0.03092 | 0.00077 | -0.00263 | -0.00985 | 0.00008  | 0.00419  | 0.00142  |
| 8672  | 1887.84 | 123.9 | 3.51 | 0.65  | 0.0424 | 0.0032  | 30.62 | 0.487 | 22.589 | 3.1389 | 0.00453 | -0.00478 | -0.03291 | 0.00144 | -0.00152 | -0.01049 | 0.00075  | 0.00529  | 0.00078  |
| 8673  | 1888.13 | 123.9 | 3.51 | 0.64  | 0.0389 | 0.0097  | 30.74 | 0.486 | 22.722 | 3.1392 | 0.00832 | -0.00204 | -0.03444 | 0.00265 | -0.00065 | -0.01097 | 0.00196  | 0.00617  | 0.00030  |
| 8674  | 1887.98 | 123.9 | 3.51 | 0.65  | 0.0430 | 0.0018  | 30.86 | 0.487 | 22.841 | 3.1387 | 0.00970 | 0.00141  | -0.03349 | 0.00309 | 0.00045  | -0.01067 | 0.00240  | 0.00727  | 0.00060  |
| 8675  | 1887.98 | 123.8 | 3.51 | 0.65  | 0.0410 | 0.0062  | 30.99 | 0.487 | 22.969 | 3.1383 | 0.01177 | 0.00484  | -0.03457 | 0.00375 | 0.00154  | -0.01102 | 0.00306  | 0.00836  | 0.00025  |
| 8676  | 1887.98 | 123.9 | 3.51 | 0.65  | 0.0448 | 0.0008  | 31.11 | 0.487 | 23.085 | 3.1391 | 0.01522 | 0.00585  | -0.03607 | 0.00485 | 0.00186  | -0.01149 | 0.00415  | 0.00868  | -0.00022 |
| 8677  | 1888.13 | 124.0 | 3.51 | 0.64  | 0.0417 | 0.0057  | 31.24 | 0.487 | 23.219 | 3.1388 | 0.01831 | 0.01229  | -0.03405 | 0.00583 | 0.00392  | -0.01085 | 0.00514  | 0.01074  | 0.00042  |
| 8678  | 1888.13 | 124.0 | 3.51 | 0.65  | 0.0420 | 0.0059  | 31.36 | 0.487 | 23.339 | 3.1381 | 0.02344 | 0.01895  | -0.03388 | 0.00747 | 0.00604  | -0.01080 | 0.00678  | 0.01286  | 0.00048  |
| 8679  | 1887.70 | 124.0 | 3.51 | 0.64  | 0.0376 | 0.0062  | 31.49 | 0.486 | 23.476 | 3.1386 | 0.02684 | 0.02723  | -0.03260 | 0.00855 | 0.00868  | -0.01039 | 0.00786  | 0.01550  | 0.00088  |
| 8680  | 1887.98 | 123.8 | 3.51 | 0.64  | 0.0399 | 0.0066  | 31.62 | 0.486 | 23.595 | 3.1392 | 0.03119 | 0.03492  | -0.03221 | 0.00993 | 0.01112  | -0.01026 | 0.00924  | 0.01794  | 0.00101  |
| 8681  | 1887.98 | 123.9 | 3.51 | 0.65  | 0.0430 | -0.0020 | 31.74 | 0.487 | 23.714 | 3.1385 | 0.03760 | 0.04076  | -0.03216 | 0.01198 | 0.01299  | -0.01025 | 0.01129  | 0.01981  | 0.00102  |
| 8682  | 1887.84 | 123.9 | 3.51 | 0.65  | 0.0434 | -0.0009 | 31.87 | 0.487 | 23.840 | 3.1383 | 0.04367 | 0.04505  | -0.03319 | 0.01392 | 0.01435  | -0.01058 | 0.01322  | 0.02117  | 0.00069  |
| 8683  | 1888.13 | 123.9 | 3.51 | 0.64  | 0.0410 | -0.0012 | 31.99 | 0.486 | 23.969 | 3.1385 | 0.05030 | 0.04812  | -0.03264 | 0.01603 | 0.01533  | -0.01040 | 0.01533  | 0.02215  | 0.00087  |
| 8684  | 1887.70 | 123.9 | 3.51 | 0.64  | 0.0396 | 0.0017  | 32.12 | 0.486 | 24.102 | 3.1387 | 0.05768 | 0.04839  | -0.03495 | 0.01838 | 0.01542  | -0.01114 | 0.01768  | 0.02224  | 0.00013  |
| 8685  | 1887.98 | 123.9 | 3.51 | 0.64  | 0.0413 | 0.0008  | 32.24 | 0.487 | 24.217 | 3.1394 | 0.06211 | 0.04984  | -0.03537 | 0.01979 | 0.01588  | -0.01127 | 0.01909  | 0.02270  | 0.00000  |
| 8686  | 1888.13 | 124.0 | 3.51 | 0.64  | 0.0406 | 0.0051  | 32.36 | 0.486 | 24.343 | 3.1396 | 0.06598 | 0.05156  | -0.03384 | 0.02102 | 0.01642  | -0.01078 | 0.02032  | 0.02324  | 0.00049  |
| 8687  | 1887.84 | 124.0 | 3.51 | 0.64  | 0.0410 | -0.0012 | 32.49 | 0.486 | 24.469 | 3.1386 | 0.06904 | 0.05808  | -0.03062 | 0.02200 | 0.01850  | -0.00976 | 0.02130  | 0.02532  | 0.00151  |
| 8688  | 1888.13 | 123.9 | 3.51 | 0.63  | 0.0351 | 0.0077  | 32.61 | 0.486 | 24.606 | 3.1392 | 0.07220 | 0.06009  | -0.02816 | 0.02300 | 0.01914  | -0.00897 | 0.02231  | 0.02596  | 0.00230  |
| 8689  | 1888.27 | 123.7 | 3.51 | 0.64  | 0.0365 | 0.0075  | 32.74 | 0.486 | 24.727 | 3.1398 | 0.07343 | 0.05992  | -0.02591 | 0.02339 | 0.01908  | -0.00825 | 0.02269  | 0.02590  | 0.00302  |
| 8690  | 1887.55 | 123.9 | 3.51 | 0.64  | 0.0369 | 0.0021  | 32.87 | 0.486 | 24.852 | 3.1381 | 0.07773 | 0.06049  | -0.02437 | 0.02477 | 0.01927  | -0.00777 | 0.02408  | 0.02609  | 0.00350  |
| 8691  | 1887.70 | 123.7 | 3.51 | 0.64  | 0.0365 | 0.0028  | 32.99 | 0.486 | 24.980 | 3.1380 | 0.08164 | 0.05794  | -0.01929 | 0.02602 | 0.01847  | -0.00615 | 0.02532  | 0.02528  | 0.00512  |
| 8692  | 1887.84 | 123.7 | 3.51 | 0.64  | 0.0372 | 0.0004  | 33.12 | 0.486 | 25.105 | 3.1388 | 0.08469 | 0.05524  | -0.01682 | 0.02698 | 0.01760  | -0.00536 | 0.02629  | 0.02442  | 0.00591  |
| 8693  | 1888.42 | 123.7 | 3.51 | 0.63  | 0.0358 | 0.0006  | 33.24 | 0.486 | 25.231 | 3.1391 | 0.08656 | 0.04758  | -0.01188 | 0.02758 | 0.01516  | -0.00379 | 0.02688  | 0.02198  | 0.00749  |
| 8694  | 1888.27 | 124.0 | 3.51 | 0.64  | 0.0369 | -0.0007 | 33.36 | 0.486 | 25.354 | 3.1393 | 0.08315 | 0.04067  | -0.01011 | 0.02649 | 0.01295  | -0.00322 | 0.02579  | 0.01977  | 0.00805  |
| 8695  | 1888.13 | 124.0 | 3.51 | 0.64  | 0.0345 | 0.0054  | 33.49 | 0.486 | 25.481 | 3.1386 | 0.08022 | 0.03405  | -0.00535 | 0.02556 | 0.01085  | -0.00171 | 0.02487  | 0.01767  | 0.00957  |
| 8696  | 1887.84 | 124.1 | 3.51 | 0.64  | 0.0362 | 0.0017  | 33.61 | 0.486 | 25.606 | 3.1378 | 0.07311 | 0.03027  | 0.00222  | 0.02330 | 0.00965  | 0.00071  | 0.02260  | 0.01647  | 0.01198  |
| 8697  | 1887.70 | 124.1 | 3.51 | 0.64  | 0.0362 | 0.0045  | 33.74 | 0.486 | 25.730 | 3.1386 | 0.06947 | 0.02683  | 0.00633  | 0.02214 | 0.00855  | 0.00202  | 0.02144  | 0.01537  | 0.01329  |
| 8698  | 1887.98 | 124.1 | 3.51 | 0.64  | 0.0369 | 0.0030  | 33.87 | 0.486 | 25.854 | 3.1384 | 0.06214 | 0.02544  | 0.01295  | 0.01980 | 0.00810  | 0.00413  | 0.01911  | 0.01492  | 0.01540  |
| 8699  | 1888.27 | 124.1 | 3.51 | 0.64  | 0.0382 | 0.0010  | 33.99 | 0.486 | 25.976 | 3.1397 | 0.05512 | 0.02480  | 0.02160  | 0.01756 | 0.00790  | 0.00688  | 0.01686  | 0.01472  | 0.01815  |
| 8700  | 1887.84 | 123.9 | 3.51 | 0.63  | 0.0331 | 0.0093  | 34.11 | 0.485 | 26.113 | 3.1397 | 0.04764 | 0.02519  | 0.02826  | 0.01517 | 0.00802  | 0.00900  | 0.01448  | 0.01484  | 0.02027  |
| 8701  | 1888.42 | 123.9 | 3.51 | 0.63  | 0.0341 | 0.0090  | 34.24 | 0.486 | 26.238 | 3.1416 | 0.04350 | 0.02521  | 0.03026  | 0.01385 | 0.00802  | 0.00963  | 0.01315  | 0.01484  | 0.02090  |
| 8702  | 1888.13 | 123.8 | 3.51 | 0.63  | 0.0348 | 0.0084  | 34.37 | 0.486 | 26.360 | 3.1411 | 0.04024 | 0.02660  | 0.03422  | 0.01281 | 0.00847  | 0.01089  | 0.01212  | 0.01529  | 0.02216  |
| 8703  | 1888.13 | 123.9 | 3.51 | 0.64  | 0.0358 | 0.0090  | 34.49 | 0.486 | 26.481 | 3.1414 | 0.03894 | 0.02458  | 0.03363  | 0.01240 | 0.00782  | 0.01070  | 0.01170  | 0.01464  | 0.02198  |
| 8704  | 1887.98 | 123.9 | 3.51 | 0.63  | 0.0348 | 0.0066  | 34.61 | 0.486 | 26.607 | 3.1390 | 0.04292 | 0.02413  | 0.03792  | 0.01367 | 0.00769  | 0.01208  | 0.01298  | 0.01451  | 0.02335  |
| 8705  | 1888.42 | 124.0 | 3.51 | 0.63  | 0.0334 | 0.0067  | 34.74 | 0.485 | 26.738 | 3.1384 | 0.04345 | 0.02300  | 0.04124  | 0.01385 | 0.00733  | 0.01314  | 0.01315  | 0.01415  | 0.02441  |
| 8706  | 1887.84 | 124.1 | 3.51 | 0.63  | 0.0351 | 0.0058  | 34.86 | 0.486 | 26.856 | 3.1383 | 0.04226 | 0.01841  | 0.04103  | 0.01346 | 0.00587  | 0.01308  | 0.01277  | 0.01268  | 0.02435  |
| 8707  | 1888.13 | 124.1 | 3.51 | 0.64  | 0.0351 | 0.0105  | 34.99 | 0.486 | 26.981 | 3.1401 | 0.04021 | 0.01479  | 0.04331  | 0.01280 | 0.00471  | 0.01379  | 0.01211  | 0.01153  | 0.02506  |
| 8708  | 1887.98 | 124.2 | 3.51 | 0.64  | 0.0382 | 0.0028  | 35.12 | 0.486 | 27.098 | 3.1407 | 0.03750 | 0.01146  | 0.04069  | 0.01194 | 0.00365  | 0.01295  | 0.01125  | 0.01047  | 0.02423  |
| 8709  | 1887.98 | 123.9 | 3.51 | 0.64  | 0.0338 | 0.0079  | 35.24 | 0.486 | 27.230 | 3.1437 | 0.03148 | 0.00529  | 0.03917  | 0.01001 | 0.00168  | 0.01246  | 0.00932  | 0.00850  | 0.02373  |
| 8710  | 1887.98 | 123.8 | 3.51 | 0.64  | 0.0358 | 0.0043  | 35.37 | 0.486 | 27.355 | 3.1455 | 0.02763 | 0.00311  | 0.03121  | 0.00878 | 0.00099  | 0.00992  | 0.00809  | 0.00781  | 0.02119  |
| 8711  | 1887.70 | 123.8 | 3.51 | 0.64  | 0.0376 | 0.0034  | 35.49 | 0.486 | 27.477 | 3.1453 | 0.02657 | -0.00131 | 0.02571  | 0.00845 | -0.00042 | 0.00817  | 0.00775  | 0.00640  | 0.01945  |
| 8712  | 1887.84 | 124.1 | 3.51 | 0.63  | 0.0345 | 0.0064  | 35.61 | 0.486 | 27.608 | 3.1441 | 0.02513 | -0.00114 | 0.02057  | 0.00799 | -0.00036 | 0.00654  | 0.00730  | 0.00646  | 0.01781  |
| 8713  | 1888.27 | 124.1 | 3.51 | 0.64  | 0.0358 | 0.0025  | 35.74 | 0.486 | 27.729 | 3.1399 | 0.02811 | 0.00423  | 0.01863  | 0.00895 | 0.00135  | 0.00593  | 0.00826  | 0.00816  | 0.01721  |
| 8714  | 1887.98 | 124.1 | 3.51 | 0.64  | 0.0351 | 0.0077  | 35.87 | 0.486 | 27.855 | 3.1375 | 0.02835 | 0.00905  | 0.01492  | 0.00904 | 0.00289  | 0.00475  | 0.00834  | 0.00970  | 0.01603  |
| 8715  | 1887.70 | 124.2 | 3.51 | 0.63  | 0.0334 | 0.0067  | 35.99 | 0.486 | 27.987 | 3.1367 | 0.02503 | 0.01178  | 0.01038  | 0.00798 | 0.00376  | 0.00331  | 0.00729  | 0.01058  | 0.01458  |
| 8716  | 1887.70 | 123.9 | 3.51 | 0.64  | 0.0365 | 0.0000  | 36.11 | 0.486 | 28.099 | 3.1365 | 0.02347 | 0.00810  | 0.00693  | 0.00748 | 0.00258  | 0.00221  | 0.00679  | 0.00940  | 0.01348  |
| 8717  | 1887.98 | 123.9 | 3.51 | 0.64  | 0.0379 | 0.0008  | 36.24 | 0.486 | 28.224 | 3.1419 | 0.01873 | -0.00328 | -0.00071 | 0.00596 | -0.00104 | -0.00023 | 0.00527  | 0.00577  | 0.01104  |
| 8718  | 1887.98 | 123.9 | 3.51 | 0.63  | 0.0341 | 0.0052  | 36.36 | 0.486 | 28.359 | 3.1461 | 0.01543 | -0.01535 | -0.00837 | 0.00491 | -0.00488 | -0.00266 | 0.00421  | 0.00194  | 0.00861  |
| 8719  | 1887.98 | 123.9 | 3.51 | 0.64  | 0.0365 | 0.0010  | 36.49 | 0.486 | 28.479 | 3.1482 | 0.01777 | -0.02318 | -0.01291 | 0.00565 | -0.00736 | -0.00410 | 0.00495  | -0.00054 | 0.00717  |
| 8720  | 1887.84 | 124.0 | 3.51 | 0.63  | 0.0351 | 0.0067  | 36.62 | 0.486 | 28.608 | 3.1485 | 0.01489 | -0.03118 | -0.01624 | 0.00473 | -0.00990 | -0.00516 | 0.00404  | -0.00308 | 0.00611  |
| 8721  | 1888.27 | 124.0 | 3.51 | 0.64  | 0.0382 | -0.0028 | 36.74 | 0.486 | 28.726 | 3.1483 | 0.00858 | -0.03304 | -0.01490 | 0.00273 | -0.01050 | -0.00473 | 0.00203  | -0.00368 | 0.00654  |
| 8722  | 1887.98 | 123.9 | 3.51 | 0.64  | 0.0338 | 0.0069  | 36.87 | 0.486 | 28.859 | 3.1432 | 0.00696 | -0.03109 | -0.01100 | 0.00221 | -0.00989 | -0.00350 | 0.00152  | -0.00307 | 0.00777  |
| 8723  | 1888.13 | 123.8 | 3.51 | 0.64  | 0.0375 | 0.0025  | 36.99 | 0.486 | 28.973 | 3.1425 | 0.00204 | -0.03053 | -0.01082 | 0.00065 | -0.00972 | -0.00344 | -0.00004 | -0.00290 | 0.00783  |
| 8724  | 1887.84 | 123.9 | 3.51 | 0.65  | 0.0389 | -0.0014 | 3     |       |        |        |         |          |          |         |          |          |          |          |          |

Table A9. Concluded.

Run = 139

M = 1.60

xsppos = 39.852

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc   | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|---------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 8744  | 1887.70 | 123.9 | 3.51 | 0.64  | 0.0351 | 0.0086  | 39.61 | 0.486 | 31.605 | 3.1485 | -0.00334 | -0.02502 | -0.06248 | -0.00106 | -0.00795 | -0.01984 | -0.00175 | -0.00113 | -0.00857 |
| 8745  | 1887.98 | 124.0 | 3.51 | 0.64  | 0.0382 | 0.0056  | 39.74 | 0.486 | 31.725 | 3.1485 | -0.00012 | -0.02408 | -0.06239 | -0.00004 | -0.00765 | -0.01982 | -0.00073 | -0.00083 | -0.00855 |
| 8746  | 1887.84 | 124.0 | 3.51 | 0.64  | 0.0345 | 0.0101  | 39.87 | 0.486 | 31.857 | 3.1483 | -0.00117 | -0.02485 | -0.06294 | -0.00037 | -0.00789 | -0.01999 | -0.00106 | -0.00107 | -0.00872 |
| 8747  | 1888.13 | 124.3 | 3.51 | 0.64  | 0.0400 | 0.0010  | 39.99 | 0.486 | 31.972 | 3.1494 | -0.00235 | -0.02874 | -0.06276 | -0.00075 | -0.00912 | -0.01993 | -0.00144 | -0.00231 | -0.00866 |
| 8748  | 1888.13 | 124.2 | 3.51 | 0.64  | 0.0403 | -0.0007 | 40.11 | 0.486 | 32.096 | 3.1495 | -0.00587 | -0.02593 | -0.06329 | -0.00186 | -0.00823 | -0.02010 | -0.00256 | -0.00142 | -0.00882 |
| 8749  | 1888.13 | 124.1 | 3.51 | 0.64  | 0.0362 | 0.0073  | 40.24 | 0.486 | 32.228 | 3.1494 | -0.00488 | -0.02635 | -0.06116 | -0.00155 | -0.00837 | -0.01942 | -0.00224 | -0.00155 | -0.00815 |
| 8750  | 1887.84 | 124.1 | 3.51 | 0.64  | 0.0375 | 0.0062  | 40.36 | 0.486 | 32.348 | 3.1499 | -0.00960 | -0.02754 | -0.05821 | -0.00305 | -0.00874 | -0.01848 | -0.00374 | -0.00192 | -0.00721 |
| 8751  | 1887.98 | 124.1 | 3.51 | 0.64  | 0.0386 | 0.0049  | 40.49 | 0.486 | 32.473 | 3.1520 | -0.01160 | -0.03006 | -0.05708 | -0.00368 | -0.00954 | -0.01811 | -0.00437 | -0.00272 | -0.00684 |
| 8752  | 1888.13 | 123.9 | 3.51 | 0.64  | 0.0372 | 0.0023  | 40.62 | 0.486 | 32.603 | 3.1528 | -0.01209 | -0.03353 | -0.05586 | -0.00383 | -0.01063 | -0.01772 | -0.00453 | -0.00382 | -0.00645 |
| 8753  | 1888.27 | 123.9 | 3.51 | 0.64  | 0.0369 | 0.0058  | 40.74 | 0.486 | 32.728 | 3.1521 | -0.01403 | -0.03512 | -0.05011 | -0.00445 | -0.01114 | -0.01590 | -0.00514 | -0.00432 | -0.00463 |
| 8754  | 1887.84 | 124.0 | 3.51 | 0.64  | 0.0341 | 0.0108  | 40.87 | 0.486 | 32.858 | 3.1510 | -0.01310 | -0.03697 | -0.04641 | -0.00416 | -0.01173 | -0.01473 | -0.00485 | -0.00491 | -0.00346 |
| 8755  | 1888.13 | 123.9 | 3.51 | 0.64  | 0.0403 | 0.0040  | 40.99 | 0.486 | 32.969 | 3.1531 | -0.01294 | -0.03964 | -0.04988 | -0.00410 | -0.01257 | -0.01582 | -0.00480 | -0.00575 | -0.00455 |
| 8756  | 1887.98 | 123.9 | 3.51 | 0.63  | 0.0358 | 0.0062  | 41.12 | 0.486 | 33.107 | 3.1509 | -0.01499 | -0.03835 | -0.05263 | -0.00476 | -0.01217 | -0.01670 | -0.00545 | -0.00535 | -0.00543 |
| 8757  | 1887.98 | 124.0 | 3.51 | 0.64  | 0.0365 | 0.0066  | 41.24 | 0.486 | 33.232 | 3.1510 | -0.01914 | -0.03365 | -0.05440 | -0.00607 | -0.01068 | -0.01726 | -0.00677 | -0.00386 | -0.00599 |
| 8758  | 1887.84 | 124.1 | 3.51 | 0.63  | 0.0321 | 0.0125  | 41.36 | 0.485 | 33.362 | 3.1512 | -0.02236 | 0.04227  | -0.05734 | -0.00710 | 0.01341  | -0.01819 | -0.00779 | 0.02023  | -0.00692 |
| 8759  | 1887.98 | 124.0 | 3.51 | 0.64  | 0.0372 | 0.0069  | 41.49 | 0.486 | 33.476 | 3.1519 | -0.02571 | 0.12262  | -0.06170 | -0.00816 | 0.03890  | -0.01957 | -0.00885 | 0.04572  | -0.00830 |
| 8760  | 1887.70 | 123.9 | 3.51 | 0.64  | 0.0345 | 0.0101  | 41.62 | 0.486 | 33.607 | 3.1533 | -0.02947 | 0.16153  | -0.06562 | -0.00935 | 0.05122  | -0.02081 | -0.01004 | 0.05804  | -0.00954 |
| 8761  | 1888.13 | 124.1 | 3.51 | 0.65  | 0.0369 | 0.0077  | 41.74 | 0.486 | 33.723 | 3.1565 | -0.02483 | 0.15703  | -0.07154 | -0.00787 | 0.04975  | -0.02266 | -0.00856 | 0.05657  | -0.01139 |
| 8762  | 1887.98 | 124.2 | 3.51 | 0.64  | 0.0375 | 0.0053  | 41.86 | 0.486 | 33.850 | 3.1575 | 0.00832  | 0.15192  | -0.07283 | 0.00263  | 0.04811  | -0.02307 | 0.00194  | 0.05493  | -0.01179 |
| 8763  | 1887.98 | 123.8 | 3.51 | 0.64  | 0.0348 | 0.0056  | 41.99 | 0.486 | 33.980 | 3.1570 | 0.09375  | 0.14225  | -0.07116 | 0.02970  | 0.04506  | -0.02254 | 0.02900  | 0.05188  | -0.01127 |
| 8764  | 1887.84 | 123.7 | 3.51 | 0.64  | 0.0351 | 0.0086  | 42.11 | 0.486 | 34.107 | 3.1564 | 0.16007  | 0.15793  | -0.07353 | 0.05071  | 0.05004  | -0.02329 | 0.05002  | 0.05685  | -0.01202 |
| 8765  | 1887.84 | 123.9 | 3.51 | 0.64  | 0.0348 | 0.0066  | 42.24 | 0.486 | 34.230 | 3.1566 | 0.17252  | 0.18478  | -0.07442 | 0.05465  | 0.05854  | -0.02358 | 0.05396  | 0.06536  | -0.01230 |
| 8766  | 1887.70 | 124.3 | 3.51 | 0.64  | 0.0365 | 0.0056  | 42.36 | 0.486 | 34.351 | 3.1555 | 0.17505  | 0.18478  | -0.07605 | 0.05547  | 0.05856  | -0.02410 | 0.05478  | 0.06538  | -0.01283 |
| 8767  | 1887.70 | 124.1 | 3.51 | 0.63  | 0.0345 | 0.0092  | 42.49 | 0.486 | 34.483 | 3.1557 | 0.17034  | 0.18478  | -0.07522 | 0.05398  | 0.05855  | -0.02384 | 0.05329  | 0.06537  | -0.01257 |
| 8768  | 1888.27 | 124.1 | 3.51 | 0.64  | 0.0362 | 0.0045  | 42.62 | 0.486 | 34.605 | 3.1573 | 0.18366  | 0.18478  | -0.07409 | 0.05817  | 0.05852  | -0.02347 | 0.05747  | 0.06534  | -0.01220 |
| 8769  | 1888.27 | 124.1 | 3.51 | 0.64  | 0.0317 | 0.0095  | 42.74 | 0.486 | 34.735 | 3.1605 | 0.18366  | 0.18478  | -0.07876 | 0.05811  | 0.05846  | -0.02492 | 0.05742  | 0.06528  | -0.01365 |
| 8770  | 1887.84 | 124.2 | 3.51 | 0.63  | 0.0303 | 0.0153  | 42.87 | 0.485 | 34.866 | 3.1605 | 0.18366  | 0.18478  | -0.08159 | 0.05811  | 0.05846  | -0.02582 | 0.05742  | 0.06528  | -0.01455 |
| 8771  | 1887.98 | 124.2 | 3.51 | 0.64  | 0.0324 | 0.0127  | 42.99 | 0.486 | 34.983 | 3.1605 | 0.18366  | 0.18478  | -0.08273 | 0.05811  | 0.05846  | -0.02618 | 0.05742  | 0.06528  | -0.01491 |
| 8772  | 1888.27 | 124.1 | 3.51 | 0.64  | 0.0334 | 0.0067  | 43.11 | 0.486 | 35.105 | 3.1618 | 0.18366  | 0.18478  | -0.08325 | 0.05809  | 0.05844  | -0.02633 | 0.05739  | 0.06526  | -0.01506 |
| 8773  | 1887.98 | 124.0 | 3.51 | 0.64  | 0.0345 | 0.0092  | 43.24 | 0.486 | 35.231 | 3.1607 | 0.18366  | 0.18478  | -0.07357 | 0.05811  | 0.05846  | -0.02328 | 0.05741  | 0.06528  | -0.01200 |
| 8774  | 1888.13 | 124.0 | 3.51 | 0.64  | 0.0351 | 0.0067  | 43.37 | 0.486 | 35.354 | 3.1615 | 0.18366  | 0.18478  | -0.00855 | 0.05809  | 0.05845  | -0.00270 | 0.05740  | 0.06526  | 0.00857  |
| 8775  | 1888.27 | 124.0 | 3.51 | 0.63  | 0.0338 | 0.0088  | 43.49 | 0.485 | 35.484 | 3.1588 | 0.18366  | 0.18478  | 0.10255  | 0.05814  | 0.05850  | 0.03247  | 0.05745  | 0.06532  | 0.04374  |
| 8776  | 1888.42 | 124.0 | 3.51 | 0.63  | 0.0348 | 0.0084  | 43.62 | 0.486 | 35.610 | 3.1563 | 0.18366  | 0.18478  | 0.17045  | 0.05819  | 0.05854  | 0.05400  | 0.05749  | 0.06536  | 0.06527  |
| 8777  | 1888.13 | 124.1 | 3.51 | 0.63  | 0.0341 | 0.0080  | 43.74 | 0.486 | 35.736 | 3.1544 | 0.18366  | 0.18478  | 0.18328  | 0.05822  | 0.05858  | 0.05810  | 0.05753  | 0.06540  | 0.06937  |

Table A10. Run 140.

Run = 140

M = 1.60

xsppos = 39.851

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc   | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|---------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 8778  | 1887.84 | 124.1 | 3.51 | 0.07  | 0.0265 | 0.0253  | 13.04 | 1.185 | -6.504 | 3.1390 | 0.00221  | -0.02144 | -0.03674 | 0.00070  | -0.00683 | -0.01170 | 0.00006  | -0.00011 | -0.00044 |
| 8779  | 1887.70 | 124.2 | 3.51 | 0.06  | 0.0224 | 0.0324  | 13.04 | 1.185 | -6.492 | 3.1385 | 0.00244  | -0.02119 | -0.03510 | 0.00078  | -0.00675 | -0.01119 | 0.00013  | -0.00003 | 0.00007  |
| 8780  | 1888.13 | 124.2 | 3.51 | 0.06  | 0.0235 | 0.0292  | 13.04 | 1.185 | -6.493 | 3.1399 | 0.00138  | -0.02189 | -0.03654 | 0.00044  | -0.00697 | -0.01164 | -0.00021 | -0.00025 | -0.00038 |
| 8781  | 1888.13 | 124.1 | 3.51 | 0.06  | 0.0235 | 0.0274  | 13.04 | 1.185 | -6.497 | 3.1395 | 0.00137  | -0.02111 | -0.03481 | 0.00043  | -0.00672 | -0.01109 | -0.00021 | 0.00000  | 0.00017  |
| 8782  | 1887.98 | 124.1 | 3.51 | 0.07  | 0.0255 | 0.0266  | 13.04 | 1.185 | -6.504 | 3.1383 | 0.00275  | -0.01988 | -0.03352 | 0.00088  | -0.00634 | -0.01068 | 0.00023  | 0.00039  | 0.00058  |
| 8783  | 1887.98 | 124.4 | 3.51 | 0.27  | 0.0311 | -0.0422 | 13.04 | 0.488 | 4.995  | 3.1388 | 0.02228  | 0.00670  | -0.01270 | 0.00710  | 0.00213  | -0.00405 | 0.00645  | 0.00886  | 0.00721  |
| 8784  | 1888.13 | 124.3 | 3.51 | 0.27  | 0.0290 | -0.0396 | 13.12 | 0.488 | 5.078  | 3.1380 | 0.02529  | 0.01114  | -0.01370 | 0.00806  | 0.00355  | -0.00437 | 0.00741  | 0.01027  | 0.00689  |
| 8785  | 1888.27 | 124.3 | 3.51 | 0.27  | 0.0287 | -0.0313 | 13.24 | 0.488 | 5.199  | 3.1399 | 0.02205  | 0.01144  | -0.01608 | 0.00702  | 0.00364  | -0.00512 | 0.00638  | 0.01037  | 0.00614  |
| 8786  | 1887.98 | 124.2 | 3.51 | 0.26  | 0.0249 | -0.0250 | 13.37 | 0.487 | 5.337  | 3.1386 | 0.01991  | 0.01255  | -0.01714 | 0.00634  | 0.00400  | -0.00546 | 0.00570  | 0.01072  | 0.00580  |
| 8787  | 1887.98 | 124.4 | 3.50 | 0.26  | 0.0228 | -0.0224 | 13.36 | 0.487 | 5.336  | 3.1392 | 0.01774  | 0.01284  | -0.01745 | 0.00565  | 0.00409  | -0.00556 | 0.00500  | 0.01081  | 0.00570  |
| 8788  | 1888.13 | 124.4 | 3.51 | 0.27  | 0.0249 | -0.0232 | 13.49 | 0.488 | 5.450  | 3.1383 | 0.01801  | 0.01156  | -0.01679 | 0.00574  | 0.00368  | -0.00535 | 0.00509  | 0.01041  | 0.00591  |
| 8789  | 1887.98 | 124.0 | 3.51 | 0.25  | 0.0242 | -0.0226 | 13.49 | 0.487 | 5.465  | 3.1386 | 0.01903  | 0.01128  | -0.01730 | 0.00606  | 0.00359  | -0.00551 | 0.00542  | 0.01032  | 0.00575  |
| 8790  | 1887.98 | 124.0 | 3.51 | 0.26  | 0.0235 | -0.0183 | 13.49 | 0.487 | 5.461  | 3.1391 | 0.01721  | 0.00953  | -0.01794 | 0.00548  | 0.00303  | -0.00571 | 0.00484  | 0.00976  | 0.00554  |
| 8791  | 1888.13 | 124.1 | 3.51 | 0.29  | 0.0252 | -0.0202 | 13.61 | 0.489 | 5.559  | 3.1386 | 0.02308  | 0.00763  | -0.01753 | 0.00735  | 0.00243  | -0.00558 | 0.00671  | 0.00915  | 0.00568  |
| 8792  | 1887.70 | 124.1 | 3.51 | 0.28  | 0.0242 | -0.0133 | 13.74 | 0.488 | 5.696  | 3.1387 | 0.02715  | 0.00481  | -0.02040 | 0.00865  | 0.00153  | -0.00650 | 0.00800  | 0.00825  | 0.00476  |
| 8793  | 1888.42 | 124.2 | 3.51 | 0.25  | 0.0190 | -0.0021 | 13.86 | 0.486 | 5.850  | 3.1393 | 0.03180  | 0.00616  | -0.02186 | 0.01013  | 0.00196  | -0.00696 | 0.00948  | 0.00869  | 0.00430  |
| 8794  | 1888.27 | 124.0 | 3.51 | 0.25  | 0.0232 | -0.0082 | 13.87 | 0.487 | 5.842  | 3.1405 | 0.03024  | 0.00531  | -0.02237 | 0.00963  | 0.00169  | -0.00712 | 0.00898  | 0.00841  | 0.00414  |
| 8795  | 1887.84 | 124.3 | 3.51 | 0.25  | 0.0214 | -0.0045 | 13.99 | 0.486 | 5.972  | 3.1382 | 0.03469  | 0.00627  | -0.01783 | 0.01105  | 0.00200  | -0.00568 | 0.01041  | 0.00872  | 0.00558  |
| 8796  | 1887.98 | 124.3 | 3.51 | 0.26  | 0.0214 | 0.0011  | 14.11 | 0.487 | 6.086  | 3.1377 | 0.03456  | 0.00236  | -0.01774 | 0.01101  | 0.00075  | -0.00565 | 0.01037  | 0.00748  | 0.00561  |
| 8797  | 1887.98 | 124.3 | 3.51 | 0.27  | 0.0201 | 0.0078  | 14.24 | 0.487 | 6.210  | 3.1382 | 0.03018  | 0.00060  | -0.01948 | 0.00962  | 0.00019  | -0.00621 | 0.00897  | 0.00691  | 0.00505  |
| 8798  | 1888.13 | 124.2 | 3.51 | 0.26  | 0.0214 | 0.0104  | 14.37 | 0.487 | 6.341  | 3.1383 | 0.02721  | 0.00567  | -0.01858 | 0.00867  | 0.00181  | -0.00592 | 0.00802  | 0.00853  | 0.00534  |
| 8799  | 1887.98 | 124.2 | 3.51 | 0.24  | 0.0183 | 0.0180  | 14.37 | 0.486 | 6.357  | 3.1385 | 0.02713  | 0.00467  | -0.02046 | 0.00864  | 0.00149  | -0.00652 | 0.00800  | 0.00821  | 0.00574  |
| 8800  | 1887.98 | 124.0 | 3.51 | 0.24  | 0.0190 | 0.0128  | 14.37 | 0.486 | 6.355  | 3.1378 | 0.02688  | 0.00623  | -0.01952 | 0.00857  | 0.00198  | -0.00622 | 0.00792  | 0.00871  | 0.00504  |
| 8801  | 1888.27 | 124.3 | 3.51 | 0.25  | 0.0207 | 0.0147  | 14.49 | 0.486 | 6.473  | 3.1384 | 0.02568  | 0.01010  | -0.01920 | 0.00818  | 0.00322  | -0.00612 | 0.00754  | 0.00994  | 0.00514  |
| 8802  | 1887.98 | 124.2 | 3.51 | 0.23  | 0.0166 | 0.0208  | 14.62 | 0.485 | 6.616  | 3.1385 | 0.02360  | 0.01007  | -0.01940 | 0.00752  | 0.00321  | -0.00618 | 0.00687  | 0.00993  | 0.00508  |
| 8803  | 1887.98 | 124.0 | 3.51 | 0.24  | 0.0207 | 0.0175  | 14.62 | 0.486 | 6.609  | 3.1384 | 0.02730  | 0.01278  | -0.01894 | 0.00870  | 0.00407  | -0.00604 | 0.00805  | 0.01079  | 0.00522  |
| 8804  | 1887.84 | 124.1 | 3.51 | 0.24  | 0.0166 | 0.0292  | 14.74 | 0.486 | 6.732  | 3.1381 | 0.02621  | 0.01153  | -0.01662 | 0.00835  | 0.00368  | -0.00530 | 0.00771  | 0.01040  | 0.00596  |
| 8805  | 1887.98 | 124.3 | 3.51 | 0.25  | 0.0217 | 0.0246  | 14.87 | 0.487 | 6.845  | 3.1387 | 0.02927  | 0.01316  | -0.01888 | 0.00932  | 0.00419  | -0.00601 | 0.00868  | 0.01092  | 0.00525  |
| 8806  | 1887.55 | 124.1 | 3.51 | 0.23  | 0.0176 | 0.0344  | 14.99 | 0.485 | 6.991  | 3.1389 | 0.03004  | 0.01098  | -0.01554 | 0.00957  | 0.00350  | -0.00495 | 0.00892  | 0.01022  | 0.00631  |
| 8807  | 1888.13 | 124.2 | 3.51 | 0.24  | 0.0180 | 0.0383  | 15.11 | 0.486 | 7.107  | 3.1393 | 0.03018  | 0.01214  | -0.01408 | 0.00961  | 0.00387  | -0.00449 | 0.00897  | 0.01059  | 0.00677  |
| 8808  | 1887.70 | 124.2 | 3.51 | 0.25  | 0.0180 | 0.0383  | 15.24 | 0.486 | 7.228  | 3.1383 | 0.02982  | 0.01585  | -0.01503 | 0.00950  | 0.00505  | -0.00479 | 0.00886  | 0.01178  | 0.00647  |
| 8809  | 1887.84 | 124.2 | 3.51 | 0.24  | 0.0166 | 0.0441  | 15.36 | 0.485 | 7.363  | 3.1382 | 0.03435  | 0.01881  | -0.01473 | 0.01095  | 0.00599  | -0.00469 | 0.01030  | 0.01272  | 0.00657  |
| 8810  | 1887.98 | 124.1 | 3.51 | 0.24  | 0.0159 | 0.0474  | 15.49 | 0.486 | 7.483  | 3.1381 | 0.03479  | 0.01802  | -0.01500 | 0.01109  | 0.00574  | -0.00478 | 0.01044  | 0.01247  | 0.00648  |
| 8811  | 1887.55 | 124.1 | 3.51 | 0.25  | 0.0149 | 0.0469  | 15.61 | 0.486 | 7.604  | 3.1382 | 0.03190  | 0.01402  | -0.01557 | 0.01016  | 0.00447  | -0.00496 | 0.00952  | 0.01119  | 0.00630  |
| 8812  | 1888.56 | 124.1 | 3.51 | 0.25  | 0.0186 | 0.0527  | 15.74 | 0.486 | 7.729  | 3.1396 | 0.03434  | 0.01983  | -0.01798 | 0.01094  | 0.00632  | -0.00573 | 0.01029  | 0.01304  | 0.00553  |
| 8813  | 1888.13 | 124.2 | 3.51 | 0.26  | 0.0203 | 0.0462  | 15.86 | 0.487 | 7.840  | 3.1384 | 0.03545  | 0.02264  | -0.01492 | 0.01130  | 0.00721  | -0.00476 | 0.01065  | 0.01394  | 0.00650  |
| 8814  | 1887.55 | 124.2 | 3.51 | 0.24  | 0.0162 | 0.0532  | 15.99 | 0.486 | 7.984  | 3.1381 | 0.03168  | 0.01989  | -0.01436 | 0.01010  | 0.00634  | -0.00457 | 0.00945  | 0.01306  | 0.00668  |
| 8815  | 1888.27 | 124.2 | 3.51 | 0.26  | 0.0186 | 0.0517  | 16.12 | 0.487 | 8.094  | 3.1389 | 0.03326  | 0.01799  | -0.00787 | 0.01060  | 0.00573  | -0.00251 | 0.00995  | 0.01245  | 0.00875  |
| 8816  | 1887.98 | 124.3 | 3.51 | 0.25  | 0.0162 | 0.0579  | 16.24 | 0.486 | 8.229  | 3.1386 | 0.03167  | 0.00897  | -0.00192 | 0.01009  | 0.00286  | -0.00061 | 0.00945  | 0.00958  | 0.01065  |
| 8817  | 1887.84 | 124.3 | 3.51 | 0.26  | 0.0176 | 0.0558  | 16.37 | 0.487 | 8.345  | 3.1386 | 0.03118  | 0.00310  | -0.00522 | 0.00994  | 0.00099  | -0.00166 | 0.00929  | 0.00771  | 0.00960  |
| 8818  | 1887.41 | 124.3 | 3.51 | 0.27  | 0.0166 | 0.0590  | 16.49 | 0.487 | 8.463  | 3.1374 | 0.03241  | -0.00078 | -0.00675 | 0.01033  | -0.00025 | -0.00215 | 0.00968  | 0.00648  | 0.00911  |
| 8819  | 1888.42 | 124.2 | 3.51 | 0.26  | 0.0176 | 0.0567  | 16.61 | 0.487 | 8.591  | 3.1400 | 0.03423  | -0.00403 | -0.00749 | 0.01090  | -0.00128 | -0.00239 | 0.01025  | 0.00544  | 0.00887  |
| 8820  | 1887.98 | 124.2 | 3.51 | 0.26  | 0.0186 | 0.0471  | 16.74 | 0.486 | 8.719  | 3.1392 | 0.03390  | -0.00477 | -0.00614 | 0.01080  | -0.00152 | -0.00196 | 0.01015  | 0.00520  | 0.00930  |
| 8821  | 1887.84 | 124.1 | 3.51 | 0.27  | 0.0203 | 0.0452  | 16.86 | 0.487 | 8.830  | 3.1386 | 0.03210  | -0.00678 | -0.00901 | 0.01023  | -0.00216 | -0.00287 | 0.00958  | 0.00456  | 0.00839  |
| 8822  | 1888.27 | 124.1 | 3.51 | 0.27  | 0.0210 | 0.0391  | 16.99 | 0.487 | 8.959  | 3.1390 | 0.02573  | -0.01566 | -0.01165 | 0.00820  | -0.00499 | -0.00371 | 0.00755  | 0.00173  | 0.00755  |
| 8823  | 1887.70 | 124.2 | 3.51 | 0.27  | 0.0231 | 0.0318  | 17.11 | 0.487 | 9.080  | 3.1381 | 0.01998  | -0.02592 | -0.01104 | 0.00637  | -0.00826 | -0.00352 | 0.00572  | -0.00154 | 0.00774  |
| 8824  | 1887.98 | 124.2 | 3.51 | 0.26  | 0.0234 | 0.0320  | 17.24 | 0.487 | 9.212  | 3.1386 | 0.01297  | -0.04315 | -0.00849 | 0.00413  | -0.01375 | -0.00271 | 0.00349  | -0.00702 | 0.00855  |
| 8825  | 1887.98 | 124.1 | 3.51 | 0.24  | 0.0190 | 0.0361  | 17.37 | 0.486 | 9.356  | 3.1385 | 0.00467  | -0.06516 | -0.00855 | 0.00149  | -0.02076 | -0.00273 | 0.00084  | -0.01404 | 0.00853  |
| 8826  | 1888.42 | 124.1 | 3.51 | 0.25  | 0.0224 | 0.0333  | 17.49 | 0.486 | 9.471  | 3.1386 | 0.00116  | -0.06806 | -0.00182 | 0.00037  | -0.02168 | -0.00058 | -0.00028 | -0.01496 | 0.01068  |
| 8827  | 1887.84 | 124.1 | 3.51 | 0.26  | 0.0217 | 0.0320  | 17.62 | 0.487 | 9.589  | 3.1377 | -0.00720 | -0.06952 | -0.00085 | -0.00230 | -0.02216 | -0.00027 | -0.00294 | -0.01543 | 0.01099  |
| 8828  | 1888.13 | 124.1 | 3.51 | 0.27  | 0.0262 | 0.0242  | 17.74 | 0.487 | 9.708  | 3.1392 | -0.01849 | -0.05972 | -0.00083 | -0.00589 | -0.01903 | -0.00026 | -0.00654 | -0.01230 | 0.01099  |
| 8829  | 1887.70 | 124.2 | 3.51 | 0.26  | 0.0224 | 0.0277  | 17.87 | 0.487 | 9.841  | 3.1381 | -0.02247 | -0.03845 | -0.00519 | -0.00716 | -0.01225 | -0.00165 | -0.00781 | -0.00553 | 0.00960  |
| 8830  | 1888.56 | 124.1 | 3.51 | 0.26  | 0.0204 | 0.0340  | 17.99 | 0.487 | 9.967  | 3.1398 | -0.03076 | -0.03215 | -0.01080 | -0.00980 | -0.01024 | -0.00344 | -0.01044 | -0.00352 | 0.00782  |
| 8831  | 1888.27 | 124.2 | 3.51 | 0.26  | 0.0217 | 0.0311  | 18.12 | 0.487 | 10.088 | 3.1380 | -0.03799 |          |          |          |          |          |          |          |          |

Table A10. Continued.

Run = 140

M = 1.60

xsp05 = 39.851

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 8851  | 1888.13 | 124.5 | 3.50 | 0.26  | 0.0241 | 0.0315 | 20.62 | 0.487 | 12.588 | 3.1385 | -0.00568 | -0.01584 | -0.09270 | -0.00181 | -0.00505 | -0.02954 | -0.00245 | 0.00167  | -0.01828 |
| 8852  | 1888.27 | 124.5 | 3.51 | 0.25  | 0.0245 | 0.0363 | 20.74 | 0.487 | 12.717 | 3.1389 | -0.00549 | -0.01763 | -0.09859 | -0.00175 | -0.00562 | -0.03141 | -0.00240 | 0.00111  | -0.02015 |
| 8853  | 1887.84 | 124.5 | 3.50 | 0.26  | 0.0245 | 0.0363 | 20.86 | 0.487 | 12.839 | 3.1392 | -0.00702 | -0.02023 | -0.10461 | -0.00223 | -0.00645 | -0.03333 | -0.00288 | 0.00028  | -0.02207 |
| 8854  | 1888.27 | 124.5 | 3.51 | 0.26  | 0.0241 | 0.0361 | 20.99 | 0.487 | 12.968 | 3.1397 | -0.00618 | -0.02378 | -0.09686 | -0.00197 | -0.00758 | -0.03085 | -0.00261 | -0.00085 | -0.01959 |
| 8855  | 1887.98 | 124.5 | 3.50 | 0.26  | 0.0252 | 0.0358 | 21.11 | 0.487 | 13.088 | 3.1385 | -0.00381 | -0.02668 | -0.07149 | -0.00122 | -0.00850 | -0.02278 | -0.00186 | -0.00178 | -0.01152 |
| 8856  | 1887.84 | 124.4 | 3.51 | 0.25  | 0.0217 | 0.0395 | 21.24 | 0.486 | 13.220 | 3.1394 | -0.00190 | -0.03150 | -0.04767 | -0.00061 | -0.01003 | -0.01518 | -0.00125 | -0.00331 | -0.00393 |
| 8857  | 1888.42 | 124.4 | 3.51 | 0.25  | 0.0262 | 0.0363 | 21.36 | 0.487 | 13.342 | 3.1402 | -0.00203 | -0.03339 | -0.03984 | -0.00065 | -0.01063 | -0.01269 | -0.00129 | -0.00391 | -0.00143 |
| 8858  | 1888.27 | 124.4 | 3.51 | 0.25  | 0.0231 | 0.0383 | 21.49 | 0.487 | 13.468 | 3.1393 | 0.00134  | -0.03628 | -0.03528 | 0.00043  | -0.01156 | -0.01124 | -0.00022 | -0.00484 | 0.00002  |
| 8859  | 1888.13 | 124.4 | 3.51 | 0.26  | 0.0272 | 0.0332 | 21.62 | 0.487 | 13.587 | 3.1395 | -0.00181 | -0.03854 | -0.03965 | -0.00058 | -0.01228 | -0.01263 | -0.00122 | -0.00555 | -0.00137 |
| 8860  | 1888.13 | 124.3 | 3.51 | 0.27  | 0.0258 | 0.0352 | 21.74 | 0.487 | 13.704 | 3.1387 | -0.00523 | -0.03873 | -0.04466 | -0.00167 | -0.01234 | -0.01423 | -0.00231 | -0.00562 | -0.00297 |
| 8861  | 1887.84 | 124.4 | 3.50 | 0.26  | 0.0228 | 0.0335 | 21.87 | 0.487 | 13.836 | 3.1383 | -0.00851 | -0.03184 | -0.04961 | -0.00271 | -0.01015 | -0.01581 | -0.00336 | -0.00342 | -0.00455 |
| 8862  | 1887.98 | 124.4 | 3.51 | 0.26  | 0.0255 | 0.0332 | 21.99 | 0.487 | 13.956 | 3.1389 | -0.01167 | -0.02257 | -0.05177 | -0.00372 | -0.00719 | -0.01649 | -0.00437 | -0.00047 | -0.00523 |
| 8863  | 1888.42 | 124.5 | 3.51 | 0.27  | 0.0248 | 0.0346 | 22.11 | 0.487 | 14.079 | 3.1401 | -0.01207 | -0.01641 | -0.03965 | -0.00384 | -0.00523 | -0.01263 | -0.00449 | 0.00150  | -0.00137 |
| 8864  | 1887.98 | 124.4 | 3.50 | 0.27  | 0.0255 | 0.0341 | 22.24 | 0.487 | 14.204 | 3.1389 | -0.01149 | -0.01605 | -0.03322 | -0.00366 | -0.00511 | -0.01058 | -0.00431 | 0.00161  | 0.00068  |
| 8865  | 1887.98 | 124.5 | 3.50 | 0.26  | 0.0248 | 0.0346 | 22.37 | 0.487 | 14.335 | 3.1384 | -0.01291 | -0.02027 | -0.03013 | -0.00411 | -0.00646 | -0.00960 | -0.00476 | 0.00027  | 0.00166  |
| 8866  | 1887.84 | 124.3 | 3.51 | 0.26  | 0.0265 | 0.0337 | 22.49 | 0.487 | 14.466 | 3.1376 | -0.01129 | -0.02493 | -0.03086 | -0.00360 | -0.00795 | -0.00984 | -0.00424 | -0.00122 | 0.00142  |
| 8867  | 1887.98 | 124.5 | 3.50 | 0.26  | 0.0234 | 0.0330 | 22.62 | 0.487 | 14.589 | 3.1391 | 0.00030  | -0.03592 | -0.03277 | 0.00010  | -0.01144 | -0.01044 | -0.00055 | -0.00472 | 0.00082  |
| 8868  | 1887.84 | 124.6 | 3.50 | 0.26  | 0.0255 | 0.0322 | 22.74 | 0.487 | 14.707 | 3.1383 | 0.01371  | -0.03823 | -0.03495 | 0.00437  | -0.01218 | -0.01114 | 0.00372  | -0.00546 | 0.00012  |
| 8869  | 1887.84 | 124.3 | 3.51 | 0.26  | 0.0256 | 0.0298 | 22.86 | 0.487 | 14.835 | 3.1382 | 0.01284  | -0.03461 | -0.03411 | 0.00409  | -0.01103 | 0.01087  | 0.00344  | -0.00431 | 0.00039  |
| 8870  | 1888.13 | 124.4 | 3.51 | 0.26  | 0.0238 | 0.0331 | 22.99 | 0.487 | 14.964 | 3.1390 | 0.00580  | -0.02067 | -0.03740 | 0.00185  | -0.00659 | -0.01191 | 0.00120  | 0.00014  | -0.00065 |
| 8871  | 1887.84 | 124.3 | 3.51 | 0.27  | 0.0272 | 0.0285 | 23.11 | 0.488 | 15.076 | 3.1390 | -0.00257 | -0.01467 | -0.03964 | -0.00082 | -0.00467 | -0.01263 | -0.00147 | 0.00205  | -0.00137 |
| 8872  | 1887.84 | 124.4 | 3.51 | 0.27  | 0.0234 | 0.0348 | 23.24 | 0.487 | 15.203 | 3.1393 | -0.01209 | -0.00943 | -0.04088 | -0.00385 | -0.00301 | -0.01302 | -0.00450 | 0.00372  | -0.00176 |
| 8873  | 1887.84 | 124.4 | 3.50 | 0.26  | 0.0224 | 0.0333 | 23.36 | 0.487 | 15.337 | 3.1392 | -0.01907 | -0.00990 | -0.04374 | -0.00608 | -0.00315 | -0.01393 | -0.00672 | 0.00357  | -0.00268 |
| 8874  | 1887.98 | 124.3 | 3.51 | 0.26  | 0.0252 | 0.0283 | 23.49 | 0.487 | 15.462 | 3.1391 | -0.01967 | -0.00927 | -0.04391 | -0.00627 | -0.00295 | -0.01399 | -0.00691 | 0.00377  | -0.00273 |
| 8875  | 1887.98 | 124.3 | 3.51 | 0.26  | 0.0255 | 0.0285 | 23.61 | 0.487 | 15.583 | 3.1389 | -0.00499 | -0.01062 | -0.04510 | -0.00159 | -0.00338 | -0.01437 | -0.00224 | 0.00334  | -0.00311 |
| 8876  | 1887.70 | 124.2 | 3.51 | 0.27  | 0.0248 | 0.0272 | 23.74 | 0.487 | 15.703 | 3.1383 | 0.01345  | -0.01305 | -0.04292 | 0.00429  | -0.00416 | -0.01368 | 0.00364  | 0.00256  | -0.00242 |
| 8877  | 1887.98 | 124.1 | 3.51 | 0.27  | 0.0255 | 0.0294 | 23.86 | 0.487 | 15.829 | 3.1394 | 0.01485  | -0.01434 | -0.04464 | 0.00473  | -0.00457 | -0.01422 | 0.00408  | 0.00216  | -0.00296 |
| 8878  | 1888.27 | 124.1 | 3.51 | 0.26  | 0.0245 | 0.0307 | 23.99 | 0.487 | 15.959 | 3.1398 | 0.01308  | -0.01511 | -0.04662 | 0.00416  | -0.00481 | -0.01485 | 0.00352  | 0.00191  | -0.00359 |
| 8879  | 1888.27 | 124.2 | 3.51 | 0.26  | 0.0248 | 0.0300 | 24.11 | 0.487 | 16.083 | 3.1399 | 0.01237  | -0.01686 | -0.05164 | 0.00394  | -0.00537 | -0.01645 | 0.00329  | 0.00135  | -0.00519 |
| 8880  | 1888.13 | 124.5 | 3.50 | 0.26  | 0.0262 | 0.0298 | 24.24 | 0.487 | 16.205 | 3.1397 | 0.01000  | -0.01741 | -0.05208 | 0.00318  | -0.00555 | -0.01659 | 0.00254  | 0.00118  | -0.00533 |
| 8881  | 1888.13 | 124.5 | 3.50 | 0.26  | 0.0255 | 0.0294 | 24.36 | 0.487 | 16.332 | 3.1390 | 0.01073  | -0.01647 | -0.05533 | 0.00342  | -0.00525 | -0.01763 | 0.00277  | 0.00148  | -0.00637 |
| 8882  | 1887.98 | 124.3 | 3.51 | 0.25  | 0.0238 | 0.0341 | 24.49 | 0.487 | 16.466 | 3.1394 | 0.00927  | -0.01761 | -0.05570 | 0.00295  | -0.00561 | -0.01774 | 0.00231  | 0.00111  | -0.00648 |
| 8883  | 1888.13 | 124.3 | 3.51 | 0.26  | 0.0234 | 0.0329 | 24.61 | 0.487 | 16.591 | 3.1405 | 0.00687  | -0.01802 | -0.05732 | 0.00219  | -0.00574 | -0.01825 | 0.00154  | 0.00098  | -0.00699 |
| 8884  | 1888.13 | 124.3 | 3.51 | 0.25  | 0.0238 | 0.0303 | 24.74 | 0.487 | 16.717 | 3.1400 | 0.00725  | -0.01846 | -0.05354 | 0.00231  | -0.00588 | -0.01705 | 0.00166  | 0.00084  | -0.00579 |
| 8885  | 1887.98 | 124.3 | 3.51 | 0.27  | 0.0276 | 0.0259 | 24.86 | 0.488 | 16.826 | 3.1400 | 0.00544  | -0.01856 | -0.03970 | 0.00173  | -0.00591 | -0.01264 | 0.00109  | 0.00081  | -0.00138 |
| 8886  | 1888.13 | 124.3 | 3.51 | 0.26  | 0.0259 | 0.0268 | 24.99 | 0.487 | 16.959 | 3.1393 | 0.00713  | -0.01792 | -0.01943 | 0.00227  | -0.00571 | -0.00619 | 0.00163  | 0.00102  | 0.00507  |
| 8887  | 1888.13 | 124.3 | 3.51 | 0.25  | 0.0255 | 0.0294 | 25.12 | 0.487 | 17.091 | 3.1396 | 0.00541  | -0.01718 | -0.02131 | 0.00172  | -0.00547 | -0.00679 | 0.00108  | 0.00125  | 0.00447  |
| 8888  | 1888.27 | 124.2 | 3.51 | 0.26  | 0.0248 | 0.0309 | 25.24 | 0.487 | 17.211 | 3.1394 | 0.00555  | -0.01720 | -0.02893 | 0.00177  | -0.00548 | -0.00922 | 0.00112  | 0.00124  | 0.00204  |
| 8889  | 1887.70 | 124.2 | 3.51 | 0.25  | 0.0235 | 0.0330 | 25.36 | 0.486 | 17.344 | 3.1387 | 0.00614  | -0.01624 | -0.03611 | 0.00196  | -0.00517 | -0.01150 | 0.00131  | 0.00155  | -0.00025 |
| 8890  | 1887.98 | 124.4 | 3.51 | 0.25  | 0.0252 | 0.0283 | 25.49 | 0.487 | 17.467 | 3.1391 | 0.00661  | -0.01738 | -0.04500 | 0.00211  | -0.00554 | -0.01433 | 0.00146  | 0.00119  | -0.00307 |
| 8891  | 1887.98 | 124.3 | 3.51 | 0.25  | 0.0214 | 0.0318 | 25.61 | 0.487 | 17.593 | 3.1387 | 0.00662  | -0.01704 | -0.05405 | 0.00211  | -0.00543 | -0.01722 | 0.00146  | 0.00129  | -0.00596 |
| 8892  | 1887.84 | 124.4 | 3.50 | 0.25  | 0.0214 | 0.0346 | 25.74 | 0.487 | 17.718 | 3.1391 | 0.00615  | -0.01728 | -0.05317 | 0.00196  | -0.00550 | -0.01694 | 0.00131  | 0.00122  | -0.00568 |
| 8893  | 1887.98 | 124.5 | 3.50 | 0.25  | 0.0259 | 0.0287 | 25.86 | 0.487 | 17.839 | 3.1389 | 0.00693  | -0.01781 | -0.04585 | 0.00221  | -0.00567 | -0.01461 | 0.00156  | 0.00105  | -0.00335 |
| 8894  | 1888.13 | 124.5 | 3.50 | 0.26  | 0.0241 | 0.0296 | 25.99 | 0.487 | 17.964 | 3.1396 | 0.00623  | -0.01748 | -0.02345 | 0.00199  | -0.00557 | -0.00747 | 0.00134  | 0.00115  | 0.00379  |
| 8895  | 1888.13 | 124.3 | 3.51 | 0.26  | 0.0276 | 0.0250 | 26.12 | 0.487 | 18.083 | 3.1396 | 0.00534  | -0.01701 | -0.02211 | 0.00170  | -0.00542 | -0.00704 | 0.00105  | 0.00131  | 0.00422  |
| 8896  | 1887.55 | 124.3 | 3.50 | 0.25  | 0.0245 | 0.0251 | 26.24 | 0.487 | 18.214 | 3.1393 | 0.00633  | -0.01819 | -0.02404 | 0.00202  | -0.00579 | -0.00766 | 0.00137  | 0.00093  | 0.00360  |
| 8897  | 1888.13 | 124.4 | 3.51 | 0.27  | 0.0238 | 0.0229 | 26.37 | 0.487 | 18.332 | 3.1404 | 0.00403  | -0.01783 | -0.02729 | 0.00128  | -0.00568 | -0.00869 | 0.00064  | 0.00104  | 0.00257  |
| 8898  | 1888.13 | 124.4 | 3.51 | 0.27  | 0.0235 | 0.0255 | 26.49 | 0.487 | 18.455 | 3.1394 | 0.00484  | -0.01755 | -0.02951 | 0.00154  | -0.00559 | -0.00940 | 0.00090  | 0.00113  | 0.00186  |
| 8899  | 1887.55 | 124.4 | 3.50 | 0.25  | 0.0211 | 0.0316 | 26.62 | 0.486 | 18.602 | 3.1386 | 0.00551  | -0.01717 | -0.02853 | 0.00176  | -0.00547 | -0.00909 | 0.00111  | 0.00125  | 0.00217  |
| 8900  | 1887.84 | 124.3 | 3.51 | 0.26  | 0.0187 | 0.0303 | 26.74 | 0.487 | 18.717 | 3.1390 | 0.00457  | -0.01818 | -0.03152 | 0.00146  | -0.00579 | -0.01004 | 0.00081  | 0.00093  | 0.00122  |
| 8901  | 1888.42 | 124.2 | 3.51 | 0.26  | 0.0193 | 0.0297 | 26.86 | 0.487 | 18.841 | 3.1395 | 0.00604  | -0.01687 | -0.03302 | 0.00192  | -0.00537 | -0.01052 | 0.00128  | 0.00135  | 0.00074  |
| 8902  | 1887.70 | 124.3 | 3.51 | 0.25  | 0.0173 | 0.0314 | 26.99 | 0.486 | 18.971 | 3.1386 | 0.00550  | -0.01611 | -0.03447 | 0.00175  | -0.00513 | -0.01098 | 0.00111  | 0.00159  | 0.00028  |
| 8903  | 1887.84 | 124.3 | 3.51 | 0.25  | 0.0173 | 0.0296 | 27.11 | 0.486 | 19.097 | 3.1393 | 0.00413  | -0.01807 | -0.03504 | 0.00132  | -0.00576 | -0.01116 | 0.00067  | 0.00097  | 0.00010  |
| 8904  | 1888.13 | 124.2 | 3.51 | 0.25  | 0.0159 | 0.0335 |       |       |        |        |          |          |          |          |          |          |          |          |          |

Table A10. Continued.

Run = 140

M = 1.60

xsppos = 39.851

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c  | dpp03c  |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|---------|---------|
| 8924  | 1887.98 | 124.3 | 3.51 | 0.24  | 0.0176 | 0.0363 | 29.74 | 0.486 | 21.736 | 3.1383 | 0.00219  | -0.02083 | -0.02959 | 0.00070  | -0.00664 | -0.00943 | 0.00005  | 0.00008 | 0.00183 |
| 8925  | 1887.98 | 124.4 | 3.51 | 0.25  | 0.0193 | 0.0344 | 29.87 | 0.486 | 21.852 | 3.1383 | 0.00191  | -0.02099 | -0.02694 | 0.00061  | -0.00669 | -0.00858 | -0.00004 | 0.00003 | 0.00267 |
| 8926  | 1888.13 | 124.5 | 3.50 | 0.25  | 0.0224 | 0.0287 | 29.99 | 0.486 | 21.974 | 3.1394 | 0.00048  | -0.02098 | -0.02887 | 0.00015  | -0.00668 | -0.00920 | -0.00049 | 0.00004 | 0.00206 |
| 8927  | 1888.27 | 124.4 | 3.51 | 0.25  | 0.0221 | 0.0303 | 30.11 | 0.486 | 22.095 | 3.1393 | -0.00048 | -0.02029 | -0.02564 | -0.00015 | -0.00646 | -0.00817 | -0.00080 | 0.00026 | 0.00309 |
| 8928  | 1887.84 | 124.3 | 3.51 | 0.24  | 0.0193 | 0.0298 | 30.24 | 0.486 | 22.228 | 3.1388 | -0.00077 | -0.01926 | -0.02666 | -0.00025 | -0.00614 | -0.00849 | -0.00089 | 0.00059 | 0.00276 |
| 8929  | 1887.98 | 124.1 | 3.51 | 0.25  | 0.0204 | 0.0322 | 30.37 | 0.486 | 22.348 | 3.1387 | 0.00049  | -0.01639 | -0.02661 | 0.00016  | -0.00522 | -0.00848 | -0.00049 | 0.00150 | 0.00278 |
| 8930  | 1887.98 | 124.2 | 3.51 | 0.25  | 0.0231 | 0.0300 | 30.49 | 0.486 | 22.469 | 3.1387 | 0.00051  | -0.01361 | -0.02959 | 0.00016  | -0.00434 | -0.00943 | -0.00048 | 0.00239 | 0.00183 |
| 8931  | 1887.84 | 124.2 | 3.51 | 0.25  | 0.0241 | 0.0287 | 30.61 | 0.486 | 22.594 | 3.1390 | 0.00107  | -0.01096 | -0.03033 | 0.00034  | -0.00349 | -0.00966 | -0.00030 | 0.00323 | 0.00160 |
| 8932  | 1888.27 | 124.3 | 3.51 | 0.25  | 0.0234 | 0.0311 | 30.74 | 0.486 | 22.721 | 3.1396 | 0.00250  | -0.00787 | -0.03158 | 0.00080  | -0.00251 | -0.01006 | 0.00015  | 0.00422 | 0.00120 |
| 8933  | 1887.84 | 124.3 | 3.51 | 0.25  | 0.0207 | 0.0370 | 30.86 | 0.486 | 22.851 | 3.1380 | 0.00521  | -0.00374 | -0.03023 | 0.00166  | -0.00119 | -0.00963 | 0.00102  | 0.00553 | 0.00163 |
| 8934  | 1887.55 | 124.1 | 3.51 | 0.25  | 0.0197 | 0.0346 | 30.99 | 0.486 | 22.969 | 3.1385 | 0.00766  | -0.00086 | -0.03266 | 0.00244  | -0.00027 | -0.01041 | 0.00179  | 0.00645 | 0.00085 |
| 8935  | 1887.98 | 124.1 | 3.51 | 0.25  | 0.0193 | 0.0353 | 31.11 | 0.486 | 23.101 | 3.1396 | 0.00784  | 0.00171  | -0.03422 | 0.00250  | 0.00055  | -0.01090 | 0.00185  | 0.00727 | 0.00036 |
| 8936  | 1887.70 | 124.2 | 3.51 | 0.25  | 0.0204 | 0.0331 | 31.24 | 0.486 | 23.227 | 3.1382 | 0.01136  | 0.00422  | -0.03244 | 0.00362  | 0.00134  | -0.01034 | 0.00297  | 0.00807 | 0.00092 |
| 8937  | 1887.98 | 124.3 | 3.51 | 0.25  | 0.0214 | 0.0346 | 31.36 | 0.486 | 23.347 | 3.1395 | 0.01361  | 0.00871  | -0.03197 | 0.00433  | 0.00278  | -0.01018 | 0.00369  | 0.00950 | 0.00108 |
| 8938  | 1888.27 | 124.2 | 3.51 | 0.25  | 0.0235 | 0.0255 | 31.49 | 0.487 | 23.468 | 3.1393 | 0.01789  | 0.01314  | -0.03266 | 0.00570  | 0.00419  | -0.01040 | 0.00505  | 0.01091 | 0.00086 |
| 8939  | 1888.27 | 124.4 | 3.51 | 0.24  | 0.0228 | 0.0326 | 31.61 | 0.486 | 23.599 | 3.1386 | 0.02454  | 0.02008  | -0.03286 | 0.00782  | 0.00640  | -0.01047 | 0.00717  | 0.01312 | 0.00079 |
| 8940  | 1887.98 | 124.5 | 3.50 | 0.24  | 0.0214 | 0.0272 | 31.74 | 0.486 | 23.730 | 3.1381 | 0.03006  | 0.02951  | -0.03258 | 0.00958  | 0.00940  | -0.01038 | 0.00893  | 0.01613 | 0.00088 |
| 8941  | 1888.13 | 124.5 | 3.50 | 0.25  | 0.0228 | 0.0288 | 31.86 | 0.486 | 23.849 | 3.1395 | 0.03165  | 0.03574  | -0.03347 | 0.01008  | 0.01139  | -0.01066 | 0.00944  | 0.01811 | 0.00060 |
| 8942  | 1888.27 | 124.3 | 3.51 | 0.25  | 0.0200 | 0.0311 | 31.99 | 0.486 | 23.972 | 3.1395 | 0.03719  | 0.04081  | -0.03302 | 0.01185  | 0.01300  | -0.01052 | 0.01120  | 0.01972 | 0.00074 |
| 8943  | 1887.55 | 124.3 | 3.51 | 0.25  | 0.0242 | 0.0249 | 32.12 | 0.487 | 24.093 | 3.1380 | 0.04263  | 0.04464  | -0.03454 | 0.01359  | 0.01423  | -0.01101 | 0.01294  | 0.02095 | 0.00025 |
| 8944  | 1888.13 | 124.4 | 3.51 | 0.25  | 0.0221 | 0.0257 | 32.24 | 0.486 | 24.224 | 3.1392 | 0.04930  | 0.04655  | -0.03465 | 0.01571  | 0.01483  | -0.01104 | 0.01506  | 0.02155 | 0.00022 |
| 8945  | 1888.13 | 124.5 | 3.50 | 0.25  | 0.0231 | 0.0290 | 32.36 | 0.486 | 24.345 | 3.1395 | 0.05606  | 0.04756  | -0.03486 | 0.01786  | 0.01515  | -0.01110 | 0.01721  | 0.02187 | 0.00015 |
| 8946  | 1887.98 | 124.5 | 3.50 | 0.24  | 0.0204 | 0.0303 | 32.49 | 0.486 | 24.474 | 3.1386 | 0.06313  | 0.04867  | -0.03316 | 0.02011  | 0.01551  | -0.01057 | 0.01947  | 0.02223 | 0.00069 |
| 8947  | 1888.27 | 124.4 | 3.51 | 0.24  | 0.0173 | 0.0361 | 32.61 | 0.486 | 24.606 | 3.1386 | 0.06653  | 0.05327  | -0.02940 | 0.02120  | 0.01697  | -0.00937 | 0.02055  | 0.02370 | 0.00189 |
| 8948  | 1888.13 | 124.4 | 3.51 | 0.25  | 0.0207 | 0.0324 | 32.74 | 0.486 | 24.726 | 3.1389 | 0.06938  | 0.05638  | -0.02937 | 0.02210  | 0.01796  | -0.00936 | 0.02146  | 0.02468 | 0.00190 |
| 8949  | 1887.98 | 124.4 | 3.51 | 0.24  | 0.0169 | 0.0359 | 32.87 | 0.486 | 24.858 | 3.1382 | 0.07155  | 0.06120  | -0.02241 | 0.02280  | 0.01950  | -0.00714 | 0.02216  | 0.02623 | 0.00412 |
| 8950  | 1887.98 | 124.3 | 3.51 | 0.24  | 0.0183 | 0.0273 | 32.99 | 0.486 | 24.982 | 3.1382 | 0.07556  | 0.06335  | -0.02225 | 0.02408  | 0.02019  | -0.00709 | 0.02343  | 0.02691 | 0.00417 |
| 8951  | 1887.98 | 124.2 | 3.51 | 0.24  | 0.0166 | 0.0338 | 33.11 | 0.486 | 25.109 | 3.1385 | 0.07795  | 0.06278  | -0.02100 | 0.02484  | 0.02000  | -0.00669 | 0.02419  | 0.02673 | 0.00457 |
| 8952  | 1887.98 | 124.3 | 3.51 | 0.24  | 0.0162 | 0.0299 | 33.24 | 0.486 | 25.236 | 3.1387 | 0.08159  | 0.05798  | -0.01566 | 0.02600  | 0.01847  | -0.00499 | 0.02535  | 0.02520 | 0.00627 |
| 8953  | 1888.27 | 124.2 | 3.51 | 0.24  | 0.0169 | 0.0275 | 33.36 | 0.486 | 25.358 | 3.1387 | 0.08484  | 0.05359  | -0.01389 | 0.02703  | 0.01707  | -0.00443 | 0.02638  | 0.02380 | 0.00683 |
| 8954  | 1887.98 | 124.3 | 3.51 | 0.25  | 0.0186 | 0.0322 | 33.49 | 0.486 | 25.477 | 3.1395 | 0.08514  | 0.04740  | -0.01145 | 0.02712  | 0.01510  | -0.00365 | 0.02647  | 0.02182 | 0.00761 |
| 8955  | 1887.98 | 124.2 | 3.51 | 0.25  | 0.0187 | 0.0294 | 33.62 | 0.486 | 25.604 | 3.1377 | 0.08257  | 0.04173  | -0.00787 | 0.02631  | 0.01330  | -0.00251 | 0.02567  | 0.02002 | 0.00875 |
| 8956  | 1887.70 | 124.3 | 3.51 | 0.25  | 0.0176 | 0.0288 | 33.74 | 0.486 | 25.727 | 3.1393 | 0.07785  | 0.03411  | -0.00306 | 0.02480  | 0.01086  | -0.00097 | 0.02415  | 0.01759 | 0.01028 |
| 8957  | 1888.56 | 124.1 | 3.51 | 0.25  | 0.0138 | 0.0295 | 33.86 | 0.486 | 25.856 | 3.1396 | 0.07058  | 0.02855  | -0.00589 | 0.02248  | 0.00909  | -0.00188 | 0.02184  | 0.01582 | 0.01313 |
| 8958  | 1887.70 | 124.1 | 3.51 | 0.25  | 0.0193 | 0.0242 | 33.99 | 0.486 | 25.972 | 3.1382 | 0.06779  | 0.02818  | 0.00888  | 0.02160  | 0.00898  | 0.00283  | 0.02095  | 0.01570 | 0.01409 |
| 8959  | 1887.98 | 124.4 | 3.51 | 0.24  | 0.0166 | 0.0254 | 34.12 | 0.486 | 26.107 | 3.1395 | 0.05776  | 0.02383  | 0.01986  | 0.01840  | 0.00759  | 0.00632  | 0.01775  | 0.01431 | 0.01758 |
| 8960  | 1887.84 | 124.4 | 3.50 | 0.24  | 0.0135 | 0.0284 | 34.24 | 0.485 | 26.237 | 3.1411 | 0.05013  | 0.02118  | 0.02289  | 0.01596  | 0.00674  | 0.00729  | 0.01531  | 0.01347 | 0.01855 |
| 8961  | 1887.98 | 124.4 | 3.51 | 0.24  | 0.0149 | 0.0310 | 34.36 | 0.485 | 26.362 | 3.1406 | 0.04641  | 0.02476  | 0.02797  | 0.01478  | 0.00788  | 0.00890  | 0.01413  | 0.01461 | 0.02016 |
| 8962  | 1887.70 | 124.3 | 3.51 | 0.24  | 0.0176 | 0.0307 | 34.49 | 0.486 | 26.484 | 3.1406 | 0.04040  | 0.02582  | 0.03024  | 0.01286  | 0.00822  | 0.00963  | 0.01222  | 0.01494 | 0.02089 |
| 8963  | 1887.84 | 124.1 | 3.51 | 0.25  | 0.0193 | 0.0270 | 34.62 | 0.486 | 26.598 | 3.1393 | 0.04015  | 0.02671  | 0.03259  | 0.01279  | 0.00851  | 0.01038  | 0.01214  | 0.01523 | 0.02164 |
| 8964  | 1887.70 | 124.4 | 3.50 | 0.24  | 0.0145 | 0.0327 | 34.74 | 0.485 | 26.741 | 3.1366 | 0.03760  | 0.02699  | 0.03720  | 0.01199  | 0.00860  | 0.01186  | 0.01134  | 0.01533 | 0.02312 |
| 8965  | 1887.98 | 124.4 | 3.51 | 0.25  | 0.0159 | 0.0288 | 34.86 | 0.486 | 26.854 | 3.1375 | 0.03808  | 0.02478  | 0.03887  | 0.01214  | 0.00790  | 0.01239  | 0.01149  | 0.01462 | 0.02365 |
| 8966  | 1888.13 | 124.4 | 3.51 | 0.24  | 0.0149 | 0.0329 | 34.99 | 0.485 | 26.988 | 3.1392 | 0.03886  | 0.02013  | 0.03849  | 0.01238  | 0.00641  | 0.01226  | 0.01173  | 0.01314 | 0.02352 |
| 8967  | 1888.27 | 124.3 | 3.51 | 0.24  | 0.0162 | 0.0327 | 35.12 | 0.486 | 27.108 | 3.1397 | 0.03864  | 0.01845  | 0.03790  | 0.01231  | 0.00588  | 0.01207  | 0.01166  | 0.01260 | 0.02333 |
| 8968  | 1887.84 | 124.4 | 3.50 | 0.25  | 0.0173 | 0.0296 | 35.24 | 0.486 | 27.231 | 3.1419 | 0.03423  | 0.01178  | 0.03873  | 0.01090  | 0.00375  | 0.01233  | 0.01025  | 0.01047 | 0.02359 |
| 8969  | 1888.13 | 124.5 | 3.50 | 0.23  | 0.0145 | 0.0299 | 35.37 | 0.485 | 27.368 | 3.1451 | 0.03035  | 0.00724  | 0.03362  | 0.00965  | 0.00230  | 0.01069  | 0.00900  | 0.00903 | 0.02195 |
| 8970  | 1887.98 | 124.4 | 3.51 | 0.25  | 0.0183 | 0.0255 | 35.49 | 0.486 | 27.479 | 3.1451 | 0.02745  | 0.00480  | 0.03123  | 0.00873  | 0.00153  | 0.00993  | 0.00808  | 0.00825 | 0.02119 |
| 8971  | 1887.98 | 124.3 | 3.51 | 0.24  | 0.0166 | 0.0301 | 35.62 | 0.486 | 27.611 | 3.1449 | 0.02511  | 0.00226  | 0.02582  | 0.00799  | 0.00072  | 0.00821  | 0.00734  | 0.00744 | 0.01947 |
| 8972  | 1887.98 | 124.3 | 3.51 | 0.24  | 0.0173 | 0.0277 | 35.74 | 0.486 | 27.733 | 3.1417 | 0.02740  | 0.00317  | 0.02512  | 0.00872  | 0.00101  | 0.00799  | 0.00807  | 0.00773 | 0.01925 |
| 8973  | 1888.13 | 124.3 | 3.51 | 0.24  | 0.0169 | 0.0284 | 35.87 | 0.485 | 27.863 | 3.1413 | 0.02510  | 0.00200  | 0.01959  | 0.00799  | 0.00064  | 0.00623  | 0.00734  | 0.00736 | 0.01749 |
| 8974  | 1888.27 | 124.4 | 3.51 | 0.24  | 0.0152 | 0.0293 | 35.99 | 0.485 | 27.988 | 3.1370 | 0.02760  | 0.00623  | 0.01683  | 0.00880  | 0.00199  | 0.00537  | 0.00815  | 0.00871 | 0.01662 |
| 8975  | 1887.84 | 124.4 | 3.50 | 0.24  | 0.0187 | 0.0266 | 36.12 | 0.486 | 28.106 | 3.1370 | 0.02563  | 0.00660  | 0.01222  | 0.00817  | 0.00210  | 0.00389  | 0.00752  | 0.00883 | 0.01515 |
| 8976  | 1888.42 | 124.3 | 3.51 | 0.24  | 0.0176 | 0.0288 | 36.24 | 0.486 | 28.228 | 3.1393 | 0.02145  | 0.00903  | 0.00645  | 0.00683  | 0.00288  | 0.00205  | 0.00619  | 0.00960 | 0.01331 |
| 8977  | 1887.84 | 124.2 | 3.51 | 0.24  | 0.0180 | 0.0262 |       |       |        |        |          |          |          |          |          |          |          |         |         |

Table A10. Concluded.

Run = 140

M = 1.60

xsppos = 39.852

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 8997  | 1887.98 | 124.3 | 3.51 | 0.24  | 0.0180 | 0.0290 | 38.87 | 0.486 | 30.855 | 3.1522 | -0.02980 | -0.04155 | -0.03548 | -0.00945 | -0.01318 | -0.01126 | -0.01010 | -0.00646 | 0.00000  |
| 8998  | 1887.98 | 124.3 | 3.51 | 0.24  | 0.0180 | 0.0243 | 38.99 | 0.486 | 30.981 | 3.1503 | -0.02571 | -0.03776 | -0.04270 | -0.00816 | -0.01199 | -0.01355 | -0.00881 | -0.00526 | -0.00229 |
| 8999  | 1887.98 | 124.3 | 3.51 | 0.24  | 0.0173 | 0.0258 | 39.12 | 0.486 | 31.110 | 3.1494 | -0.02050 | -0.03658 | -0.04723 | -0.00651 | -0.01161 | -0.01500 | -0.00715 | -0.00489 | -0.00374 |

Table A11. Run 141.

Run = 141

M = 1.60

xsppos = 39.851

| point | p0      | t0    | rnft | alpha | cnmrc   | cmmrc   | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|---------|---------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 9000  | 1887.70 | 124.1 | 3.51 | -0.25 | 0.0029  | 0.0375  | 13.03 | 1.180 | -6.432 | 3.1393 | 0.00241  | -0.02261 | -0.03522 | 0.00077  | -0.00720 | -0.01122 | -0.00028 | -0.00049 | -0.00013 |
| 9001  | 1888.13 | 124.3 | 3.51 | -0.24 | 0.0039  | 0.0371  | 13.03 | 1.181 | -6.439 | 3.1378 | 0.00393  | -0.01952 | -0.03407 | 0.00125  | -0.00622 | -0.01086 | 0.00021  | 0.00049  | 0.00023  |
| 9002  | 1887.55 | 124.4 | 3.50 | -0.25 | 0.0039  | 0.0352  | 13.03 | 1.181 | -6.435 | 3.1383 | 0.00363  | -0.02185 | -0.03516 | 0.00116  | -0.00696 | -0.01120 | 0.00011  | -0.00025 | -0.00012 |
| 9003  | 1887.98 | 124.3 | 3.51 | -0.26 | 0.0008  | 0.0373  | 13.03 | 1.180 | -6.425 | 3.1385 | 0.00344  | -0.02096 | -0.03507 | 0.00110  | -0.00668 | -0.01118 | 0.00005  | 0.00003  | -0.00009 |
| 9004  | 1887.98 | 124.3 | 3.51 | -0.25 | 0.0022  | 0.0371  | 13.03 | 1.180 | -6.429 | 3.1393 | 0.00296  | -0.02041 | -0.03446 | 0.00094  | -0.00650 | -0.01098 | -0.00010 | 0.00021  | 0.00011  |
| 9005  | 1888.13 | 124.1 | 3.51 | -0.17 | 0.0036  | -0.0143 | 13.03 | 0.486 | 5.017  | 3.1390 | 0.02383  | 0.00476  | -0.01336 | 0.00759  | 0.00152  | -0.00426 | 0.00655  | 0.00823  | 0.00683  |
| 9006  | 1887.98 | 124.1 | 3.51 | -0.18 | 0.0026  | -0.0140 | 13.11 | 0.485 | 5.112  | 3.1394 | 0.02263  | 0.00783  | -0.01393 | 0.00721  | 0.00250  | -0.00444 | 0.00616  | 0.00921  | 0.00665  |
| 9007  | 1887.98 | 124.1 | 3.51 | -0.19 | 0.0005  | -0.0048 | 13.24 | 0.485 | 5.244  | 3.1389 | 0.02330  | 0.01149  | -0.01592 | 0.00742  | 0.00366  | -0.00507 | 0.00638  | 0.01037  | 0.00601  |
| 9008  | 1887.98 | 124.1 | 3.51 | -0.18 | 0.0022  | -0.0020 | 13.36 | 0.485 | 5.361  | 3.1388 | 0.02057  | 0.01215  | -0.01731 | 0.00655  | 0.00387  | -0.00551 | 0.00551  | 0.01058  | 0.00557  |
| 9009  | 1887.98 | 124.1 | 3.51 | -0.20 | -0.0019 | 0.0022  | 13.49 | 0.484 | 5.508  | 3.1397 | 0.01632  | 0.01025  | -0.01915 | 0.00520  | 0.00326  | -0.00610 | 0.00416  | 0.00998  | 0.00499  |
| 9010  | 1887.84 | 124.1 | 3.51 | -0.20 | -0.0016 | 0.0089  | 13.62 | 0.484 | 5.634  | 3.1390 | 0.02119  | 0.00612  | -0.01995 | 0.00675  | 0.00195  | -0.00636 | 0.00571  | 0.00866  | 0.00473  |
| 9011  | 1888.27 | 124.1 | 3.51 | -0.20 | -0.0019 | 0.0106  | 13.61 | 0.484 | 5.632  | 3.1394 | 0.01933  | 0.00602  | -0.01931 | 0.00616  | 0.00192  | -0.00615 | 0.00512  | 0.00863  | 0.00493  |
| 9012  | 1888.42 | 124.3 | 3.51 | -0.20 | -0.0009 | 0.0084  | 13.62 | 0.484 | 5.630  | 3.1391 | 0.02153  | 0.00744  | -0.01708 | 0.00686  | 0.00237  | -0.00544 | 0.00582  | 0.00908  | 0.00565  |
| 9013  | 1887.84 | 124.2 | 3.51 | -0.20 | -0.0029 | 0.0156  | 13.74 | 0.484 | 5.760  | 3.1391 | 0.02506  | 0.00235  | -0.01940 | 0.00798  | 0.00075  | -0.00618 | 0.00694  | 0.00746  | 0.00491  |
| 9014  | 1887.84 | 124.2 | 3.51 | -0.20 | -0.0022 | 0.0141  | 13.74 | 0.484 | 5.756  | 3.1388 | 0.02557  | 0.00218  | -0.01861 | 0.00815  | 0.00069  | -0.00593 | 0.00710  | 0.00741  | 0.00516  |
| 9015  | 1888.13 | 124.1 | 3.51 | -0.20 | -0.0036 | 0.0180  | 13.86 | 0.484 | 5.884  | 3.1392 | 0.02782  | 0.00158  | -0.01833 | 0.00886  | 0.00050  | -0.00584 | 0.00782  | 0.00722  | 0.00525  |
| 9016  | 1887.98 | 124.1 | 3.51 | -0.21 | -0.0043 | 0.0251  | 13.99 | 0.484 | 6.016  | 3.1398 | 0.03254  | 0.00242  | -0.02122 | 0.01036  | 0.00077  | -0.00676 | 0.00932  | 0.00748  | 0.00433  |
| 9017  | 1887.84 | 124.2 | 3.51 | -0.18 | -0.0057 | 0.0272  | 14.11 | 0.485 | 6.123  | 3.1392 | 0.03233  | 0.00000  | -0.01957 | 0.01030  | 0.00000  | -0.00623 | 0.00925  | 0.00671  | 0.00485  |
| 9018  | 1887.84 | 124.3 | 3.51 | -0.19 | -0.0019 | 0.0292  | 14.24 | 0.485 | 6.245  | 3.1394 | 0.02998  | -0.00400 | -0.01920 | 0.00955  | -0.00127 | -0.00612 | 0.00851  | 0.00544  | 0.00497  |
| 9019  | 1887.84 | 124.0 | 3.51 | -0.19 | -0.0036 | 0.0311  | 14.24 | 0.485 | 6.249  | 3.1388 | 0.02945  | -0.00534 | -0.02128 | 0.00938  | -0.00170 | -0.00678 | 0.00834  | 0.00501  | 0.00431  |
| 9020  | 1888.42 | 124.3 | 3.51 | -0.19 | -0.0043 | 0.0344  | 14.36 | 0.485 | 6.374  | 3.1403 | 0.02607  | -0.00649 | -0.02072 | 0.00830  | -0.00207 | -0.00660 | 0.00726  | 0.00464  | 0.00449  |
| 9021  | 1887.70 | 124.0 | 3.51 | -0.19 | -0.0067 | 0.0350  | 14.37 | 0.485 | 6.377  | 3.1397 | 0.02559  | -0.00660 | -0.02106 | 0.00815  | -0.00210 | -0.00671 | 0.00711  | 0.00461  | 0.00438  |
| 9022  | 1888.13 | 124.2 | 3.51 | -0.19 | -0.0061 | 0.0381  | 14.49 | 0.485 | 6.500  | 3.1395 | 0.02379  | -0.00245 | -0.02054 | 0.00758  | -0.00078 | -0.00654 | 0.00653  | 0.00593  | 0.00454  |
| 9023  | 1887.84 | 124.3 | 3.51 | -0.19 | -0.0078 | 0.0437  | 14.61 | 0.484 | 6.624  | 3.1396 | 0.02157  | -0.00020 | -0.02041 | 0.00687  | -0.00006 | -0.00650 | 0.00583  | 0.00665  | 0.00459  |
| 9024  | 1888.13 | 124.1 | 3.51 | -0.20 | -0.0088 | 0.0422  | 14.74 | 0.484 | 6.761  | 3.1399 | 0.01917  | -0.00016 | -0.01793 | 0.00610  | -0.00005 | -0.00571 | 0.00506  | 0.00666  | 0.00538  |
| 9025  | 1887.84 | 124.1 | 3.51 | -0.18 | -0.0054 | 0.0450  | 14.87 | 0.485 | 6.870  | 3.1395 | 0.02139  | 0.00244  | -0.01694 | 0.00681  | 0.00078  | -0.00539 | 0.00577  | 0.00749  | 0.00569  |
| 9026  | 1887.84 | 124.1 | 3.51 | -0.18 | -0.0061 | 0.0484  | 14.99 | 0.485 | 6.993  | 3.1389 | 0.02428  | 0.00285  | -0.01577 | 0.00774  | 0.00091  | -0.00502 | 0.00669  | 0.00762  | 0.00606  |
| 9027  | 1888.13 | 124.1 | 3.51 | -0.19 | -0.0078 | 0.0539  | 15.11 | 0.484 | 7.131  | 3.1388 | 0.02385  | 0.00116  | -0.01472 | 0.00760  | 0.00037  | -0.00469 | 0.00656  | 0.00708  | 0.00640  |
| 9028  | 1888.27 | 124.1 | 3.51 | -0.17 | -0.0047 | 0.0575  | 15.24 | 0.485 | 7.239  | 3.1401 | 0.02271  | 0.00184  | -0.01592 | 0.00723  | 0.00059  | -0.00507 | 0.00619  | 0.00730  | 0.00602  |
| 9029  | 1888.27 | 124.0 | 3.51 | -0.19 | -0.0075 | 0.0569  | 15.24 | 0.484 | 7.253  | 3.1393 | 0.02226  | -0.00056 | -0.01400 | 0.00709  | -0.00018 | -0.00446 | 0.00605  | 0.00653  | 0.00663  |
| 9030  | 1887.98 | 124.1 | 3.51 | -0.17 | -0.0054 | 0.0581  | 15.36 | 0.485 | 7.364  | 3.1391 | 0.02322  | 0.00308  | -0.01462 | 0.00740  | 0.00098  | -0.00466 | 0.00635  | 0.00769  | 0.00643  |
| 9031  | 1888.13 | 124.1 | 3.51 | -0.18 | -0.0078 | 0.0642  | 15.49 | 0.485 | 7.495  | 3.1393 | 0.02628  | 0.00346  | -0.01648 | 0.00837  | 0.00110  | -0.00525 | 0.00733  | 0.00781  | 0.00584  |
| 9032  | 1888.13 | 124.1 | 3.51 | -0.18 | -0.0064 | 0.0631  | 15.61 | 0.485 | 7.620  | 3.1402 | 0.02561  | 0.00312  | -0.01753 | 0.00816  | 0.00100  | -0.00558 | 0.00711  | 0.00771  | 0.00550  |
| 9033  | 1887.84 | 124.2 | 3.51 | -0.17 | -0.0054 | 0.0674  | 15.74 | 0.485 | 7.735  | 3.1394 | 0.02358  | 0.00168  | -0.01598 | 0.00751  | 0.00054  | -0.00509 | 0.00647  | 0.00725  | 0.00600  |
| 9034  | 1887.98 | 124.2 | 3.51 | -0.19 | -0.0088 | 0.0701  | 15.86 | 0.484 | 7.877  | 3.1390 | 0.02048  | 0.00091  | -0.01721 | 0.00653  | 0.00029  | -0.00548 | 0.00548  | 0.00700  | 0.00560  |
| 9035  | 1887.84 | 124.1 | 3.51 | -0.17 | -0.0064 | 0.0659  | 15.99 | 0.485 | 7.990  | 3.1388 | 0.02179  | 0.00267  | -0.01592 | 0.00694  | 0.00085  | -0.00507 | 0.00590  | 0.00756  | 0.00601  |
| 9036  | 1887.98 | 124.0 | 3.51 | -0.18 | -0.0088 | 0.0701  | 16.12 | 0.485 | 8.128  | 3.1398 | 0.01896  | 0.00383  | -0.01267 | 0.00604  | 0.00122  | -0.00403 | 0.00500  | 0.00793  | 0.00705  |
| 9037  | 1888.13 | 124.1 | 3.51 | -0.17 | -0.0064 | 0.0677  | 16.24 | 0.485 | 8.240  | 3.1394 | 0.01983  | 0.00300  | -0.00618 | 0.00632  | 0.00096  | -0.00197 | 0.00527  | 0.00767  | 0.00912  |
| 9038  | 1887.84 | 124.1 | 3.51 | -0.18 | -0.0054 | 0.0655  | 16.36 | 0.485 | 8.371  | 3.1390 | 0.02051  | -0.00219 | -0.00405 | 0.00653  | -0.00070 | -0.00129 | 0.00549  | 0.00601  | 0.00980  |
| 9039  | 1887.84 | 124.1 | 3.51 | -0.17 | -0.0044 | 0.0605  | 16.49 | 0.485 | 8.484  | 3.1378 | 0.02044  | -0.00846 | -0.00544 | 0.00651  | -0.00269 | -0.00173 | 0.00547  | 0.00402  | 0.00935  |
| 9040  | 1887.70 | 124.1 | 3.51 | -0.16 | -0.0033 | 0.0601  | 16.61 | 0.486 | 8.601  | 3.1384 | 0.01954  | -0.01351 | -0.00837 | 0.00623  | -0.00430 | -0.00267 | 0.00518  | 0.00241  | 0.00842  |
| 9041  | 1888.27 | 124.1 | 3.51 | -0.17 | -0.0033 | 0.0611  | 16.74 | 0.486 | 8.734  | 3.1399 | 0.02127  | -0.01777 | -0.00945 | 0.00678  | -0.00566 | -0.00301 | 0.00573  | 0.00105  | 0.00808  |
| 9042  | 1887.98 | 124.1 | 3.51 | -0.17 | -0.0040 | 0.0551  | 16.87 | 0.486 | 8.861  | 3.1405 | 0.01872  | -0.02204 | -0.00863 | 0.00596  | -0.00702 | -0.00275 | 0.00492  | -0.00031 | 0.00834  |
| 9043  | 1887.70 | 124.2 | 3.51 | -0.17 | -0.0037 | 0.0525  | 16.99 | 0.486 | 8.984  | 3.1385 | 0.01759  | -0.02137 | -0.01161 | 0.00561  | -0.00681 | -0.00370 | 0.00456  | -0.00010 | 0.00739  |
| 9044  | 1887.84 | 124.0 | 3.51 | -0.17 | -0.0026 | 0.0484  | 17.11 | 0.486 | 9.109  | 3.1394 | 0.01276  | -0.02621 | -0.01648 | 0.00407  | -0.00835 | -0.00525 | 0.00302  | -0.00164 | 0.00584  |
| 9045  | 1887.84 | 124.1 | 3.51 | -0.17 | -0.0016 | 0.0453  | 17.24 | 0.486 | 9.231  | 3.1386 | 0.00828  | -0.03621 | -0.01465 | 0.00264  | -0.01154 | -0.00467 | 0.00160  | -0.00482 | 0.00642  |
| 9046  | 1887.98 | 124.1 | 3.51 | -0.16 | 0.0005  | 0.0427  | 17.36 | 0.486 | 9.348  | 3.1394 | 0.00103  | -0.05078 | -0.01247 | 0.00033  | -0.01617 | -0.00397 | -0.00072 | -0.00946 | 0.00712  |
| 9047  | 1887.84 | 124.2 | 3.51 | -0.16 | -0.0013 | 0.0482  | 17.49 | 0.486 | 9.479  | 3.1391 | -0.00625 | -0.06910 | -0.01254 | -0.00199 | -0.02201 | -0.00399 | -0.00303 | -0.01530 | 0.00709  |
| 9048  | 1887.84 | 124.2 | 3.51 | -0.17 | -0.0002 | 0.0414  | 17.61 | 0.486 | 9.602  | 3.1391 | -0.01128 | -0.07312 | -0.01117 | -0.00359 | -0.02329 | -0.00356 | -0.00464 | -0.01658 | 0.00753  |
| 9049  | 1887.98 | 124.1 | 3.51 | -0.17 | -0.0033 | 0.0452  | 17.74 | 0.486 | 9.732  | 3.1389 | -0.01847 | -0.06838 | -0.00940 | -0.00588 | -0.02179 | -0.00299 | -0.00693 | -0.01507 | 0.00809  |
| 9050  | 1888.27 | 124.4 | 3.51 | -0.16 | 0.0011  | 0.0440  | 17.86 | 0.486 | 9.849  | 3.1398 | -0.02364 | -0.05628 | -0.00940 | -0.00753 | -0.01793 | -0.00299 | -0.00857 | -0.01121 | 0.00809  |
| 9051  | 1887.98 | 124.2 | 3.51 | -0.17 | -0.0016 | 0.0443  | 17.99 | 0.486 | 9.985  | 3.1392 | -0.02944 | -0.03731 | -0.01259 | -0.00938 | -0.01189 | -0.00401 | -0.01042 | -0.00517 | 0.00708  |
| 9052  | 1888.27 | 124.1 | 3.51 | -0.17 | -0.0019 | 0.0460  | 18.11 | 0.485 | 10.110 | 3.1390 | -0.03350 | -0.03230 | -0.01801 | -0.01067 | -0.01029 | -0.00574 | -0.01172 | -0.00358 | 0.00535  |
| 9053  | 1887.84 | 124.1 | 3.51 | -0.18 | -0.0057 | 0.0486  | 18.24 | 0.485 | 10.242 | 3.1389 | -0.0433  |          |          |          |          |          |          |          |          |

Table A11. Concluded.

Run = 141

M = 1.60

xsppos = 39.851

| point | p0      | t0    | rnft | alpha | cnmrc   | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|---------|--------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 9073  | 1888.13 | 124.1 | 3.51 | -0.15 | 0.0046  | 0.0421 | 20.74 | 0.487 | 12.714 | 3.1390 | -0.00361 | -0.01342 | -0.09253 | -0.00115 | -0.00428 | -0.02948 | -0.00219 | 0.00244  | -0.01839 |
| 9074  | 1887.70 | 124.3 | 3.51 | -0.15 | 0.0029  | 0.0449 | 20.86 | 0.487 | 12.840 | 3.1380 | -0.00233 | -0.01412 | -0.09923 | -0.00074 | -0.00450 | -0.03162 | -0.00178 | 0.00221  | -0.02054 |
| 9075  | 1887.84 | 124.3 | 3.51 | -0.15 | 0.0022  | 0.0436 | 20.99 | 0.487 | 12.963 | 3.1388 | -0.00260 | -0.01678 | -0.10319 | -0.00083 | -0.00534 | -0.03288 | -0.00187 | 0.00137  | -0.02179 |
| 9076  | 1888.27 | 124.1 | 3.51 | -0.15 | 0.0018  | 0.0453 | 21.11 | 0.487 | 13.092 | 3.1393 | -0.00204 | -0.02058 | -0.09386 | -0.00065 | -0.00656 | -0.02990 | -0.00169 | 0.00016  | -0.01881 |
| 9077  | 1887.98 | 124.2 | 3.51 | -0.16 | 0.0029  | 0.0458 | 21.24 | 0.486 | 13.219 | 3.1391 | -0.00025 | -0.02250 | -0.05725 | -0.00008 | -0.00717 | -0.01824 | -0.00112 | -0.00045 | -0.00715 |
| 9078  | 1888.13 | 124.3 | 3.51 | -0.16 | 0.0001  | 0.0425 | 21.36 | 0.486 | 13.351 | 3.1393 | 0.00165  | -0.02771 | -0.03881 | 0.00053  | -0.00883 | -0.01236 | -0.00052 | -0.00212 | -0.00128 |
| 9079  | 1887.98 | 124.3 | 3.51 | -0.17 | 0.0008  | 0.0456 | 21.49 | 0.486 | 13.477 | 3.1391 | 0.00315  | -0.03159 | -0.03175 | 0.00100  | -0.01006 | -0.01012 | -0.00004 | -0.00335 | 0.00097  |
| 9080  | 1888.13 | 124.3 | 3.51 | -0.16 | 0.0022  | 0.0445 | 21.61 | 0.486 | 13.600 | 3.1390 | 0.00430  | -0.03438 | -0.03090 | 0.00137  | -0.01095 | -0.00984 | 0.00033  | -0.00424 | 0.00124  |
| 9081  | 1887.84 | 124.4 | 3.50 | -0.16 | 0.0015  | 0.0432 | 21.74 | 0.486 | 13.726 | 3.1389 | 0.00158  | -0.03563 | -0.03496 | 0.00050  | -0.01135 | -0.01114 | -0.00054 | -0.00464 | -0.00005 |
| 9082  | 1887.98 | 124.4 | 3.51 | -0.16 | 0.0022  | 0.0445 | 21.86 | 0.486 | 13.850 | 3.1392 | -0.00165 | -0.03664 | -0.04256 | -0.00053 | -0.01167 | -0.01356 | -0.00157 | -0.00496 | -0.00247 |
| 9083  | 1887.84 | 124.3 | 3.51 | -0.16 | 0.0032  | 0.0414 | 21.99 | 0.486 | 13.971 | 3.1387 | -0.00637 | -0.03349 | -0.04714 | -0.00203 | -0.01067 | -0.01502 | -0.00307 | -0.00396 | -0.00393 |
| 9084  | 1887.84 | 124.2 | 3.51 | -0.17 | -0.0016 | 0.0480 | 22.12 | 0.486 | 14.109 | 3.1383 | -0.00817 | -0.02082 | -0.04199 | -0.00260 | -0.00663 | -0.01338 | -0.00364 | 0.00008  | -0.00229 |
| 9085  | 1887.84 | 124.4 | 3.51 | -0.16 | 0.0018  | 0.0462 | 22.24 | 0.486 | 14.220 | 3.1375 | -0.00786 | -0.01286 | -0.03214 | -0.00251 | -0.00410 | -0.01024 | -0.00355 | 0.00261  | 0.00084  |
| 9086  | 1887.98 | 124.3 | 3.51 | -0.16 | 0.0008  | 0.0428 | 22.36 | 0.486 | 14.350 | 3.1392 | -0.00964 | -0.01272 | -0.02518 | -0.00307 | -0.00405 | -0.00802 | -0.00411 | 0.00266  | 0.00307  |
| 9087  | 1888.13 | 124.2 | 3.51 | -0.16 | 0.0011  | 0.0468 | 22.49 | 0.486 | 14.476 | 3.1394 | -0.01142 | -0.01833 | -0.02867 | -0.00364 | -0.00584 | -0.00913 | -0.00468 | 0.00087  | 0.00195  |
| 9088  | 1888.27 | 124.2 | 3.51 | -0.17 | -0.0018 | 0.0473 | 22.61 | 0.486 | 14.609 | 3.1392 | -0.00810 | -0.02509 | -0.02982 | -0.00258 | -0.00799 | -0.00950 | -0.00362 | -0.00128 | 0.00159  |
| 9089  | 1888.27 | 124.2 | 3.51 | -0.16 | 0.0049  | 0.0414 | 22.74 | 0.486 | 14.718 | 3.1396 | -0.00118 | -0.03081 | -0.03279 | -0.00038 | -0.00981 | -0.01045 | -0.00142 | -0.00310 | 0.00064  |
| 9090  | 1888.27 | 124.2 | 3.51 | -0.17 | 0.0011  | 0.0412 | 22.86 | 0.486 | 14.852 | 3.1390 | 0.01636  | -0.03797 | -0.03363 | 0.00521  | -0.01210 | -0.01071 | 0.00417  | -0.00538 | 0.00037  |
| 9091  | 1887.84 | 124.1 | 3.51 | -0.16 | 0.0035  | 0.0388 | 22.99 | 0.486 | 14.971 | 3.1387 | 0.01507  | -0.03739 | -0.03374 | 0.00480  | -0.01191 | -0.01075 | 0.00376  | -0.00520 | 0.00034  |
| 9092  | 1888.13 | 124.1 | 3.51 | -0.17 | 0.0011  | 0.0421 | 23.11 | 0.486 | 15.110 | 3.1388 | 0.00828  | -0.02317 | -0.03656 | 0.00264  | -0.00738 | -0.01165 | 0.00159  | -0.00067 | -0.00056 |
| 9093  | 1887.84 | 124.1 | 3.51 | -0.17 | 0.0022  | 0.0417 | 23.24 | 0.486 | 15.227 | 3.1387 | -0.00117 | -0.01463 | -0.03781 | -0.00037 | -0.00466 | -0.01205 | -0.00141 | 0.00205  | -0.00096 |
| 9094  | 1888.13 | 124.2 | 3.51 | -0.16 | 0.0049  | 0.0395 | 23.36 | 0.486 | 15.342 | 3.1382 | -0.00833 | -0.00911 | -0.03858 | -0.00265 | -0.00290 | -0.01229 | -0.00370 | 0.00381  | -0.00121 |
| 9095  | 1887.70 | 124.2 | 3.51 | -0.16 | 0.0039  | 0.0399 | 23.49 | 0.487 | 15.466 | 3.1372 | -0.01422 | -0.00638 | -0.04093 | -0.00453 | -0.00203 | -0.01305 | -0.00557 | 0.00468  | -0.00196 |
| 9096  | 1888.13 | 124.0 | 3.51 | -0.16 | 0.0011  | 0.0412 | 23.61 | 0.486 | 15.597 | 3.1382 | -0.01722 | -0.00824 | -0.04247 | -0.00549 | -0.00263 | -0.01353 | -0.00653 | 0.00409  | -0.00245 |
| 9097  | 1888.27 | 124.1 | 3.51 | -0.17 | 0.0001  | 0.0397 | 23.74 | 0.486 | 15.730 | 3.1395 | -0.00175 | -0.01121 | -0.04228 | -0.00056 | -0.00357 | -0.01347 | -0.00160 | 0.00314  | -0.00238 |
| 9098  | 1888.27 | 124.2 | 3.51 | -0.16 | 0.0011  | 0.0421 | 23.86 | 0.486 | 15.851 | 3.1387 | 0.01129  | -0.01219 | -0.04211 | 0.00360  | -0.00389 | -0.01342 | 0.00255  | 0.00283  | -0.00233 |
| 9099  | 1887.70 | 124.1 | 3.51 | -0.17 | 0.0022  | 0.0408 | 23.99 | 0.486 | 15.975 | 3.1376 | 0.01725  | -0.01252 | -0.04231 | 0.00550  | -0.00399 | -0.01348 | 0.00446  | 0.00272  | -0.00240 |
| 9100  | 1888.27 | 124.1 | 3.51 | -0.17 | 0.0011  | 0.0421 | 24.11 | 0.486 | 16.102 | 3.1390 | 0.01599  | -0.01340 | -0.04511 | 0.00510  | -0.00427 | -0.01437 | 0.00405  | 0.00314  | -0.00328 |
| 9101  | 1888.13 | 124.1 | 3.51 | -0.15 | 0.0035  | 0.0397 | 24.24 | 0.487 | 16.218 | 3.1385 | 0.01425  | -0.01517 | -0.04875 | 0.00454  | -0.00483 | -0.01553 | 0.00350  | 0.00188  | -0.00445 |
| 9102  | 1887.84 | 124.1 | 3.51 | -0.15 | 0.0035  | 0.0397 | 24.36 | 0.487 | 16.339 | 3.1390 | 0.01178  | -0.01611 | -0.05187 | 0.00375  | -0.00513 | -0.01653 | 0.00271  | 0.00158  | -0.00544 |
| 9103  | 1887.84 | 124.0 | 3.51 | -0.16 | 0.0018  | 0.0443 | 24.49 | 0.486 | 16.470 | 3.1391 | 0.01109  | -0.01643 | -0.05222 | 0.00353  | -0.00523 | -0.01664 | 0.00249  | 0.00148  | -0.00555 |
| 9104  | 1887.70 | 124.1 | 3.51 | -0.16 | -0.0002 | 0.0451 | 24.62 | 0.486 | 16.603 | 3.1385 | 0.00929  | -0.01773 | -0.05375 | 0.00296  | -0.00565 | -0.01713 | 0.00192  | 0.00106  | -0.00604 |
| 9105  | 1888.13 | 124.0 | 3.51 | -0.16 | 0.0022  | 0.0445 | 24.74 | 0.486 | 16.719 | 3.1391 | 0.00840  | -0.01756 | -0.05110 | 0.00268  | -0.00559 | -0.01628 | 0.00163  | 0.00112  | -0.00519 |
| 9106  | 1888.13 | 124.2 | 3.51 | -0.16 | 0.0008  | 0.0456 | 24.86 | 0.486 | 16.846 | 3.1397 | 0.00719  | -0.01661 | -0.04777 | 0.00229  | -0.00529 | -0.01521 | 0.00125  | 0.00142  | -0.00413 |
| 9107  | 1888.13 | 124.3 | 3.51 | -0.16 | 0.0005  | 0.0445 | 24.99 | 0.486 | 16.973 | 3.1389 | 0.00570  | -0.01691 | -0.03592 | 0.00182  | -0.00539 | -0.01144 | 0.00077  | 0.00132  | -0.00036 |
| 9108  | 1888.42 | 124.1 | 3.51 | -0.16 | 0.0035  | 0.0416 | 25.11 | 0.486 | 17.093 | 3.1397 | 0.00562  | -0.01664 | -0.02226 | 0.00179  | -0.00530 | -0.00709 | 0.00075  | 0.00141  | 0.00400  |
| 9109  | 1888.27 | 124.2 | 3.51 | -0.16 | 0.0025  | 0.0391 | 25.24 | 0.486 | 17.226 | 3.1397 | 0.00578  | -0.01728 | -0.02164 | 0.00184  | -0.00550 | -0.00689 | 0.00080  | 0.00121  | 0.00420  |
| 9110  | 1888.13 | 124.1 | 3.51 | -0.16 | 0.0025  | 0.0429 | 25.37 | 0.486 | 17.351 | 3.1395 | 0.00540  | -0.01717 | -0.02502 | 0.00172  | -0.00547 | -0.00797 | 0.00068  | 0.00124  | 0.00312  |
| 9111  | 1887.84 | 124.2 | 3.51 | -0.17 | -0.0002 | 0.0479 | 25.49 | 0.486 | 17.480 | 3.1383 | 0.00612  | -0.01645 | -0.03546 | 0.00195  | -0.00524 | -0.01130 | 0.00091  | 0.00147  | -0.00021 |
| 9112  | 1887.98 | 124.1 | 3.51 | -0.17 | 0.0011  | 0.0458 | 25.61 | 0.486 | 17.602 | 3.1393 | 0.00610  | -0.01646 | -0.04568 | 0.00194  | -0.00524 | -0.01455 | 0.00090  | 0.00147  | -0.00346 |
| 9113  | 1888.13 | 124.2 | 3.51 | -0.17 | 0.0008  | 0.0447 | 25.74 | 0.486 | 17.727 | 3.1380 | 0.00621  | -0.01638 | -0.05099 | 0.00198  | -0.00522 | -0.01625 | 0.00093  | 0.00149  | -0.00516 |
| 9114  | 1887.84 | 124.2 | 3.51 | -0.16 | -0.0013 | 0.0454 | 25.87 | 0.486 | 17.853 | 3.1389 | 0.00562  | -0.01781 | -0.05348 | 0.00179  | -0.00568 | -0.01704 | 0.00075  | 0.00104  | -0.00595 |
| 9115  | 1887.98 | 124.1 | 3.51 | -0.16 | 0.0008  | 0.0438 | 25.99 | 0.486 | 17.970 | 3.1386 | 0.00604  | -0.01704 | -0.03946 | 0.00192  | -0.00543 | -0.01257 | 0.00088  | 0.00128  | -0.00149 |
| 9116  | 1888.13 | 124.1 | 3.51 | -0.16 | -0.0016 | 0.0480 | 26.11 | 0.486 | 18.098 | 3.1387 | 0.00773  | -0.01613 | -0.02354 | 0.00246  | -0.00514 | -0.00750 | 0.00142  | 0.00157  | 0.00359  |
| 9117  | 1888.56 | 124.2 | 3.51 | -0.16 | -0.0040 | 0.0467 | 26.24 | 0.486 | 18.230 | 3.1396 | 0.00575  | -0.01847 | -0.02212 | 0.00183  | -0.00588 | -0.00704 | 0.00079  | 0.00083  | 0.00404  |
| 9118  | 1887.70 | 124.1 | 3.51 | -0.16 | -0.0037 | 0.0469 | 26.36 | 0.486 | 18.356 | 3.1383 | 0.00556  | -0.01752 | -0.02116 | 0.00177  | -0.00558 | -0.00674 | 0.00073  | 0.00113  | 0.00435  |
| 9119  | 1887.98 | 124.2 | 3.51 | -0.16 | -0.0023 | 0.0430 | 26.49 | 0.486 | 18.478 | 3.1378 | 0.00578  | -0.01687 | -0.02514 | 0.00184  | -0.00537 | -0.00801 | 0.00080  | 0.00134  | 0.00307  |
| 9120  | 1888.27 | 124.3 | 3.51 | -0.16 | 0.0001  | 0.0397 | 26.61 | 0.486 | 18.600 | 3.1391 | 0.00527  | -0.01739 | -0.02782 | 0.00168  | -0.00554 | -0.00886 | 0.00064  | 0.00117  | 0.00222  |
| 9121  | 1887.98 | 124.3 | 3.51 | -0.17 | -0.0044 | 0.0484 | 26.74 | 0.485 | 18.737 | 3.1386 | 0.00469  | -0.01710 | -0.02956 | 0.00149  | -0.00545 | -0.00942 | 0.00045  | 0.00126  | 0.00167  |
| 9122  | 1887.84 | 124.2 | 3.51 | -0.18 | -0.0074 | 0.0476 | 26.86 | 0.485 | 18.869 | 3.1387 | 0.00430  | -0.01847 | -0.03144 | 0.00137  | -0.00588 | -0.01002 | 0.00033  | 0.00083  | 0.00107  |
| 9123  | 1888.27 | 124.0 | 3.51 | -0.17 | -0.0071 | 0.0515 | 26.99 | 0.485 | 18.992 | 3.1390 | 0.00354  | -0.01800 | -0.03150 | 0.00113  | -0.00574 | -0.01004 | 0.00008  | 0.00098  | 0.00105  |
| 9124  | 1888.13 | 124.0 | 3.51 | -0.19 | -0.0098 | 0.0519 | 27.12 | 0.484 | 19.130 | 3.1387 | 0.00522  | -0.01763 | -0.03233 | 0.00166  | -0.00562 | -0.01030 | 0.00062  | 0.00110  | 0.00079  |
| 9125  | 1887.98 | 124.0 | 3.51 | -0.18 | -0.0109 | 0.0513 | 27.24 | 0.484 | 19.252 | 3.1392 | 0.00304  | -0.01698 | -0.03076 | 0.00097  | -0.00541 | -0.00980 | -0.00007 | 0.00130  | 0.00129  |
| 9126  | 1887.98 | 123.9 | 3.51 | -0.18 | -0.0123 | 0.0562 |       |       |        |        |          |          |          |          |          |          |          |          |          |



Table A12. Run 142.

Run = 142

M = 1.80

xsppos = 42.346

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01       | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|------------|----------|----------|----------|----------|----------|----------|----------|----------|
| 9142  | 2019.89 | 124.3 | 3.51 | 0.27  | 0.0097 | 0.0068 | 17.49 | 1.184 | -5.905 | 2.4874 | -0.03886   | -0.03125 | -0.06108 | -0.01562 | -0.01256 | -0.02456 | -0.00020 | 0.00014  | -0.00009 |
| 9143  | 2020.18 | 124.3 | 3.51 | 0.28  | 0.0097 | 0.0068 | 17.61 | 1.184 | -5.783 | 2.4881 | -0.03861   | -0.03333 | -0.06093 | -0.01552 | -0.01339 | -0.02449 | -0.00009 | -0.00069 | -0.00002 |
| 9144  | 2020.32 | 123.9 | 3.51 | 0.28  | 0.0094 | 0.0112 | 17.61 | 1.184 | -5.784 | 2.4880 | -0.03854   | -0.03205 | -0.06126 | -0.01549 | -0.01288 | -0.02462 | -0.00007 | -0.00018 | -0.00016 |
| 9145  | 2020.03 | 124.3 | 3.51 | 0.28  | 0.0091 | 0.0064 | 17.61 | 1.184 | -5.788 | 2.4865 | -0.03872   | -0.03007 | -0.06026 | -0.01557 | -0.01209 | -0.02424 | -0.00015 | 0.00061  | 0.00023  |
| 9146  | 2020.32 | 124.1 | 3.51 | 0.29  | 0.0097 | 0.0095 | 17.74 | 1.185 | -5.669 | 2.4869 | -0.03709   | -0.03131 | -0.06073 | -0.01492 | -0.01259 | -0.02442 | 0.00051  | 0.00011  | 0.00005  |
| 9147  | 2020.18 | 124.0 | 3.51 | 0.28  | 0.0111 | 0.0084 | 17.86 | 1.184 | -5.538 | 2.4881 | -0.03961   | -0.03312 | -0.06158 | -0.01592 | -0.01331 | -0.02475 | -0.00050 | -0.00061 | -0.00029 |
| 9148  | 2020.03 | 124.1 | 3.51 | 0.30  | 0.0115 | 0.0123 | 17.99 | 1.185 | -5.432 | 2.4874 | -0.03900   | -0.03147 | -0.06070 | -0.01568 | -0.01265 | -0.02440 | -0.00025 | 0.00005  | 0.00006  |
| 9149  | 2019.60 | 124.2 | 3.51 | 0.28  | 0.0077 | 0.0149 | 18.11 | 1.184 | -5.287 | 2.4861 | -0.03809   | -0.03025 | -0.05988 | -0.01532 | -0.01217 | -0.02409 | 0.00010  | 0.00054  | 0.00038  |
| 9150  | 2019.89 | 124.1 | 3.51 | 0.27  | 0.0084 | 0.0116 | 18.24 | 1.184 | -5.157 | 2.4878 | -0.03859   | -0.03154 | -0.06156 | -0.01551 | -0.01268 | -0.02475 | -0.00009 | 0.00003  | -0.00028 |
| 9151  | 2020.18 | 124.2 | 3.51 | 0.27  | 0.0080 | 0.0133 | 18.36 | 1.184 | -5.028 | 2.4878 | -0.03855   | -0.03104 | -0.06058 | -0.01550 | -0.01248 | -0.02435 | -0.00007 | 0.00023  | 0.00011  |
| 9152  | 2019.74 | 124.1 | 3.51 | 0.28  | 0.0087 | 0.0108 | 18.49 | 1.184 | -4.909 | 2.4870 | -0.03808   | -0.03088 | -0.06095 | -0.01531 | -0.01242 | -0.02451 | 0.00011  | 0.00029  | -0.00004 |
| 9153  | 2020.03 | 124.0 | 3.51 | 0.28  | 0.0108 | 0.0110 | 18.61 | 1.185 | -4.795 | 2.4866 | -0.03757   | -0.03075 | -0.06031 | -0.01511 | -0.01237 | -0.02425 | 0.00032  | 0.00034  | 0.00021  |
| 9154  | 2019.89 | 123.9 | 3.51 | 0.28  | 0.0080 | 0.0142 | 18.73 | 1.184 | -4.654 | 2.4870 | -0.03834   | -0.03176 | -0.06249 | -0.01541 | -0.01277 | -0.02513 | 0.00001  | -0.00007 | -0.00062 |
| 9155  | 2020.46 | 123.9 | 3.51 | 0.29  | 0.0101 | 0.0088 | 18.86 | 1.185 | -4.551 | 2.4880 | -0.03921   | -0.03301 | -0.06124 | -0.01576 | -0.01327 | -0.02461 | -0.00033 | -0.00056 | -0.00015 |
| 9156  | 2019.89 | 124.0 | 3.51 | 0.28  | 0.0077 | 0.0112 | 18.98 | 1.184 | -4.413 | 2.4874 | -0.03851   | -0.03211 | -0.06144 | -0.01548 | -0.01291 | -0.02470 | -0.00006 | -0.00020 | -0.00023 |
| 9157  | 2020.18 | 124.0 | 3.51 | 0.29  | 0.0097 | 0.0123 | 19.11 | 1.185 | -4.298 | 2.4872 | -0.03858   | -0.02987 | -0.06094 | -0.01551 | -0.01201 | -0.02450 | -0.00009 | 0.00069  | -0.00004 |
| 9158  | 2019.89 | 124.1 | 3.51 | 0.30  | 0.0104 | 0.0071 | 19.23 | 1.185 | -4.185 | 2.4874 | -0.03868   | -0.03202 | -0.06123 | -0.01555 | -0.01287 | -0.02462 | -0.00013 | -0.00017 | -0.00015 |
| 9159  | 2019.89 | 124.0 | 3.51 | 0.28  | 0.0104 | 0.0043 | 19.36 | 1.184 | -4.037 | 2.4872 | -0.03901   | -0.03086 | -0.06122 | -0.01568 | -0.01241 | -0.02461 | -0.00026 | 0.00030  | -0.00015 |
| 9160  | 2020.18 | 123.8 | 3.51 | 0.29  | 0.0094 | 0.0038 | 19.49 | 1.185 | -3.919 | 2.4866 | -0.03700   | -0.03041 | -0.05994 | -0.01488 | -0.01223 | -0.02410 | 0.00055  | 0.00047  | 0.00036  |
| 9161  | 2019.89 | 123.8 | 3.51 | 0.29  | 0.0118 | 0.0032 | 19.61 | 1.185 | -3.800 | 2.4865 | -0.03833   | -0.02935 | -0.06085 | -0.01541 | -0.01180 | -0.02447 | 0.00001  | 0.00090  | -0.00001 |
| 9162  | 2020.32 | 123.8 | 3.51 | 0.29  | 0.0094 | 0.0075 | 19.73 | 1.185 | -3.676 | 2.4882 | -0.03861   | -0.03159 | -0.06118 | -0.01552 | -0.01269 | -0.02459 | -0.00010 | 0.00040  | -0.00012 |
| 9163  | 2020.18 | 124.1 | 3.51 | 0.28  | 0.0097 | 0.0068 | 19.86 | 1.185 | -3.544 | 2.4873 | -0.03789   | -0.03061 | -0.06047 | -0.01523 | -0.01230 | -0.02431 | 0.00019  | 0.00040  | 0.00015  |
| 9164  | 2020.03 | 124.1 | 3.51 | 0.28  | 0.0094 | 0.0094 | 19.99 | 1.185 | -3.417 | 2.4864 | -0.03800   | -0.03083 | -0.06025 | -0.01528 | -0.01240 | -0.02423 | 0.00014  | 0.00030  | 0.00023  |
| 9165  | 2019.74 | 124.1 | 3.51 | 0.29  | 0.0108 | 0.0073 | 20.11 | 1.185 | -3.296 | 2.4871 | -0.03843   | -0.03214 | -0.06146 | -0.01545 | -0.01292 | -0.02471 | -0.00003 | -0.00022 | -0.00025 |
| 9166  | 2020.18 | 124.0 | 3.51 | 0.28  | 0.0084 | 0.0097 | 20.23 | 1.185 | -3.166 | 2.4880 | -0.03912   | -0.03070 | -0.06238 | -0.01572 | -0.01234 | -0.02507 | -0.00030 | 0.00037  | -0.00061 |
| 9167  | 2020.18 | 124.0 | 3.51 | 0.29  | 0.0104 | 0.0090 | 20.36 | 1.185 | -3.044 | 2.4873 | -0.03723   | -0.02929 | -0.06064 | -0.01497 | -0.01178 | -0.02438 | 0.00045  | 0.00093  | 0.00009  |
| 9168  | 2019.89 | 124.0 | 3.51 | 0.29  | 0.0087 | 0.0127 | 20.49 | 1.185 | -2.918 | 2.4873 | -0.03900   | -0.02630 | -0.06176 | -0.01568 | -0.01057 | -0.02483 | -0.00026 | 0.00213  | -0.00037 |
| 9169  | 2020.18 | 123.8 | 3.51 | 0.28  | 0.0073 | 0.0138 | 20.61 | 1.184 | -2.791 | 2.4873 | -0.03661   | -0.02701 | -0.05984 | -0.01472 | -0.01086 | -0.02406 | 0.00070  | 0.00185  | 0.00041  |
| 9170  | 2019.31 | 123.8 | 3.51 | 0.29  | 0.0084 | 0.0125 | 20.73 | 1.185 | -2.667 | 2.4868 | -0.03578   | -0.02987 | -0.06082 | -0.01439 | -0.01201 | -0.02446 | 0.00103  | 0.00070  | 0.00001  |
| 9171  | 2019.74 | 124.0 | 3.51 | 0.28  | 0.0077 | 0.0103 | 20.86 | 1.184 | -2.536 | 2.4861 | -0.03249   | -0.03183 | -0.06035 | -0.01307 | -0.01280 | -0.02427 | 0.00235  | -0.00010 | 0.00019  |
| 9172  | 2019.60 | 124.0 | 3.51 | 0.28  | 0.0084 | 0.0144 | 20.99 | 1.184 | -2.405 | 2.4870 | -0.03329   | -0.03303 | -0.06068 | -0.01338 | -0.01328 | -0.02440 | 0.00204  | -0.00057 | 0.00007  |
| 9173  | 2020.03 | 124.0 | 3.51 | 0.27  | 0.0073 | 0.0129 | 21.11 | 1.184 | -2.282 | 2.4879 | -0.03718   | -0.03384 | -0.06131 | -0.01495 | -0.01360 | -0.02464 | 0.00048  | -0.00090 | -0.00018 |
| 9174  | 2019.60 | 124.1 | 3.51 | 0.30  | 0.0104 | 0.0127 | 21.24 | 1.185 | -2.179 | 2.4875 | -0.03868   | -0.03199 | -0.06102 | -0.01555 | -0.01286 | -0.02453 | -0.00012 | -0.00015 | -0.00007 |
| 9175  | 2020.32 | 124.1 | 3.51 | 0.28  | 0.0094 | 0.0140 | 21.36 | 1.184 | -2.040 | 2.4873 | -0.03885   | -0.02792 | -0.06040 | -0.01562 | -0.01123 | -0.02428 | -0.00020 | 0.00148  | 0.00018  |
| 9176  | 2020.18 | 123.9 | 3.51 | 0.28  | 0.0084 | 0.0153 | 21.49 | 1.184 | -1.907 | 2.4870 | -0.03868   | -0.02219 | -0.06039 | -0.01555 | -0.00892 | -0.02428 | -0.00013 | 0.00378  | 0.00018  |
| 9177  | 2020.18 | 123.8 | 3.51 | 0.28  | 0.0067 | 0.0172 | 21.61 | 1.184 | -1.782 | 2.4870 | -0.03611   | -0.02110 | -0.06093 | -0.01452 | -0.00848 | -0.02450 | 0.00091  | 0.00422  | -0.00003 |
| 9179  | 2019.60 | 123.9 | 3.51 | 0.27  | 0.0080 | 0.0105 | 21.90 | 1.184 | -1.489 | 2.4860 | -0.03001   | -0.02537 | -0.05984 | -0.01207 | -0.01021 | -0.02407 | 0.00335  | 0.00250  | 0.00039  |
| 9180  | 2020.32 | 123.8 | 3.51 | 0.28  | 0.0097 | 0.0095 | 21.99 | 1.185 | -1.417 | 2.4882 | -0.02848   | -0.03003 | -0.06210 | -0.01144 | -0.01207 | -0.02496 | 0.00398  | 0.00064  | -0.00049 |
| 9181  | 2020.03 | 123.9 | 3.51 | 0.27  | 0.0067 | 0.0134 | 22.11 | 1.184 | -1.274 | 2.4877 | -0.03138   | -0.03344 | -0.06177 | -0.01261 | -0.01344 | -0.02483 | 0.00281  | -0.00074 | -0.00036 |
| 9182  | 2020.18 | 123.9 | 3.51 | 0.27  | 0.0077 | 0.0140 | 22.23 | 1.184 | -1.158 | 2.4866 | -0.03146   | -0.03324 | -0.05934 | -0.01265 | -0.01337 | -0.02386 | 0.00277  | -0.00066 | 0.00060  |
| 9183  | 2019.89 | 124.2 | 3.51 | 0.27  | 0.0080 | 0.0114 | 22.36 | 1.184 | -1.032 | 2.4866 | -0.03555   | -0.03306 | -0.05762 | -0.01430 | -0.01329 | -0.02317 | 0.00112  | -0.00059 | 0.00129  |
| 9184  | 2019.74 | 124.1 | 3.51 | 0.27  | 0.0067 | 0.0088 | 22.48 | 1.184 | -0.901 | 2.4865 | -0.03910   | -0.02714 | -0.05685 | -0.01573 | -0.01091 | -0.02286 | -0.00030 | 0.00179  | 0.00160  |
| 9185  | 2020.03 | 124.3 | 3.51 | 0.28  | 0.0097 | 0.0058 | 22.61 | 1.184 | -0.787 | 2.4860 | -0.04071   | -0.02094 | -0.05736 | -0.01637 | -0.00842 | -0.02307 | -0.00095 | 0.00428  | 0.00139  |
| 9186  | 2019.89 | 124.3 | 3.51 | 0.27  | 0.0080 | 0.0105 | 22.73 | 1.184 | -0.654 | 2.4867 | -0.04081   | -0.01817 | -0.05896 | -0.01641 | -0.00731 | -0.02371 | -0.00099 | 0.00540  | 0.00075  |
| 9187  | 2019.89 | 124.2 | 3.51 | 0.29  | 0.0097 | 0.0086 | 22.86 | 1.185 | -0.547 | 2.4864 | -0.03572   | -0.01736 | -0.06185 | -0.01437 | -0.00698 | -0.02488 | 0.00106  | 0.00572  | -0.00041 |
| 9188  | 2020.18 | 124.1 | 3.51 | 0.28  | 0.0097 | 0.0077 | 22.98 | 1.185 | -0.417 | 2.4867 | -0.02781   | -0.02071 | -0.06276 | -0.01119 | -0.00833 | -0.02524 | 0.00424  | 0.00438  | -0.00077 |
| 9189  | 2019.89 | 124.2 | 3.51 | 0.28  | 0.0094 | 0.0084 | 23.11 | 1.184 | -0.289 | 2.4864 | -0.02562   | -0.02418 | -0.06031 | -0.01030 | -0.00972 | -0.02425 | 0.00512  | 0.00298  | 0.00021  |
| 9190  | 2019.89 | 124.4 | 3.51 | 0.27  | 0.0097 | 0.0114 | 23.24 | 1.184 | -0.150 | 2.4865 | -0.02491   | -0.02815 | -0.05953 | -0.01002 | -0.01132 | -0.02394 | 0.00541  | 0.00138  | 0.00052  |
| 9191  | 2020.18 | 124.2 | 3.51 | 0.28  | 0.0111 | 0.0112 | 23.36 | 1.184 | -0.038 | 2.4882 | -0.02794   | -0.03231 | -0.05899 | -0.01123 | -0.01299 | -0.02371 | 0.00419  | -0.00028 | 0.00076  |
| 9192  | 2020.03 | 124.6 | 3.50 | 0.29  | 0.0094 | 0.0131 | 23.48 | 1.185 | 0.078  | 2.4872 | -0.03163   | -0.03366 | -0.05242 | -0.01272 | -0.01354 | -0.02108 | 0.00271  | -0.00083 | 0.00339  |
| 9193  | 2020.03 | 124.4 | 3.51 | 0.28  | 0.0077 | 0.0112 | 23.61 | 1.184 | 0.218  | 2.4871 | -0.03684   | -0.02910 | -0.05343 | -0.01481 | -0.01170 | -0.02148 | 0.00061  | 0.00100  | 0.00298  |
| 9194  | 2020.18 | 124.3 | 3.51 | 0.27  | 0.0067 | 0.0153 | 23.73 | 1.184 | 0.351  | 2.4869 | -0.03921   | -0.01925 | -0.05368 | -0.01577 | -0.00774 | -0.02158 | -0.00034 | 0.00497  | 0.00288  |
| 9195  | 2020.03 | 124.3 | 3.51 | 0.28  | 0.0091 | 0.0148 | 23.86 | 1.184 | 0.460  | 2.4878 | -0.04055   | -0.01817 | -0.05738 | -0.01630 | -0.00730 | -0.02307 | -0.00087 | 0.00540  | 0.00140  |
| 9196  | 2020.03 | 124.0 | 3.51 | 0.27  | 0.0091 | 0.0110 | 23.98 | 1.184 | 0.592  | 2.4871 | -0.03492</ |          |          |          |          |          |          |          |          |

Table A12. Continued.

Run = 142

M = 1.80

xsppos = 42.348

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c  |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|---------|
| 9216  | 2020.03 | 123.8 | 3.51 | 0.28  | 0.0101 | 0.0032 | 26.49 | 1.184 | 3.093  | 2.4876 | -0.02722 | -0.01943 | -0.05919 | -0.01094 | -0.00781 | -0.02379 | 0.00448  | 0.00489  | 0.00067 |
| 9217  | 2019.74 | 124.0 | 3.51 | 0.27  | 0.0098 | 0.0058 | 26.61 | 1.184 | 3.215  | 2.4862 | -0.02478 | -0.01828 | -0.05429 | -0.00997 | -0.00735 | -0.02184 | 0.00546  | 0.00535  | 0.00263 |
| 9218  | 2020.18 | 124.1 | 3.51 | 0.27  | 0.0108 | 0.0017 | 26.74 | 1.184 | 3.345  | 2.4868 | -0.02462 | -0.01759 | -0.05025 | -0.00990 | -0.00707 | -0.02021 | 0.00552  | 0.00563  | 0.00426 |
| 9219  | 2019.74 | 124.0 | 3.51 | 0.28  | 0.0101 | 0.0014 | 26.86 | 1.184 | 3.460  | 2.4866 | -0.02461 | -0.01745 | -0.04720 | -0.00990 | -0.00702 | -0.01898 | 0.00553  | 0.00569  | 0.00548 |
| 9220  | 2019.74 | 123.9 | 3.51 | 0.27  | 0.0098 | 0.0030 | 26.99 | 1.184 | 3.597  | 2.4859 | -0.02491 | -0.01613 | -0.04642 | -0.01002 | -0.00649 | -0.01867 | 0.00540  | 0.00621  | 0.00579 |
| 9221  | 2019.46 | 124.1 | 3.51 | 0.28  | 0.0104 | 0.0025 | 27.11 | 1.184 | 3.711  | 2.4861 | -0.02375 | -0.01567 | -0.04807 | -0.00955 | -0.00630 | -0.01934 | 0.00587  | 0.00640  | 0.00513 |
| 9222  | 2020.18 | 124.0 | 3.51 | 0.27  | 0.0091 | 0.0017 | 27.24 | 1.184 | 3.853  | 2.4865 | -0.02226 | -0.01519 | -0.04776 | -0.00895 | -0.00611 | -0.01921 | 0.00647  | 0.00660  | 0.00526 |
| 9223  | 2020.46 | 124.1 | 3.51 | 0.27  | 0.0115 | 0.0040 | 27.36 | 1.184 | 3.971  | 2.4873 | -0.02298 | -0.01495 | -0.04919 | -0.00924 | -0.00601 | -0.01977 | 0.00618  | 0.00669  | 0.00469 |
| 9224  | 2019.74 | 124.0 | 3.51 | 0.28  | 0.0101 | 0.0032 | 27.49 | 1.184 | 4.089  | 2.4863 | -0.02054 | -0.01455 | -0.04917 | -0.00826 | -0.00585 | -0.01978 | 0.00716  | 0.00685  | 0.00469 |
| 9225  | 2019.89 | 123.8 | 3.51 | 0.27  | 0.0094 | 0.0047 | 27.61 | 1.184 | 4.223  | 2.4860 | -0.02040 | -0.01617 | -0.04880 | -0.00821 | -0.00650 | -0.01963 | 0.00722  | 0.00620  | 0.00483 |
| 9226  | 2019.74 | 123.9 | 3.51 | 0.26  | 0.0101 | 0.0042 | 27.74 | 1.184 | 4.354  | 2.4857 | -0.01907 | -0.01524 | -0.04918 | -0.00767 | -0.00613 | -0.01979 | 0.00775  | 0.00657  | 0.00468 |
| 9227  | 2019.89 | 123.8 | 3.51 | 0.28  | 0.0104 | 0.0043 | 27.86 | 1.184 | 4.464  | 2.4873 | -0.02059 | -0.01892 | -0.05010 | -0.00828 | -0.00761 | -0.02014 | 0.00714  | 0.00510  | 0.00432 |
| 9228  | 2020.18 | 123.9 | 3.51 | 0.27  | 0.0080 | 0.0030 | 27.99 | 1.184 | 4.604  | 2.4866 | -0.02272 | -0.01724 | -0.04985 | -0.00914 | -0.00693 | -0.02005 | 0.00629  | 0.00577  | 0.00442 |
| 9229  | 2019.74 | 123.8 | 3.51 | 0.27  | 0.0098 | 0.0040 | 28.11 | 1.184 | 4.722  | 2.4854 | -0.02265 | -0.01418 | -0.04801 | -0.00911 | -0.00571 | -0.01932 | 0.00631  | 0.00700  | 0.00515 |
| 9230  | 2020.18 | 123.9 | 3.51 | 0.27  | 0.0111 | 0.0029 | 28.24 | 1.184 | 4.845  | 2.4862 | -0.02279 | -0.01248 | -0.04909 | -0.00917 | -0.00502 | -0.01975 | 0.00626  | 0.00769  | 0.00472 |
| 9231  | 2019.74 | 124.0 | 3.51 | 0.27  | 0.0087 | 0.0071 | 28.36 | 1.184 | 4.976  | 2.4856 | -0.02171 | -0.00949 | -0.04787 | -0.00873 | -0.00382 | -0.01926 | 0.00669  | 0.00889  | 0.00521 |
| 9232  | 2020.03 | 124.1 | 3.51 | 0.26  | 0.0094 | 0.0056 | 28.49 | 1.184 | 5.102  | 2.4861 | -0.01993 | -0.00993 | -0.04870 | -0.00802 | -0.00399 | -0.01959 | 0.00741  | 0.00871  | 0.00488 |
| 9233  | 2020.18 | 124.0 | 3.51 | 0.28  | 0.0087 | 0.0090 | 28.61 | 1.184 | 5.212  | 2.4858 | -0.01721 | -0.00964 | -0.04725 | -0.00692 | -0.00388 | -0.01901 | 0.00850  | 0.00883  | 0.00545 |
| 9234  | 2019.89 | 124.1 | 3.51 | 0.27  | 0.0091 | 0.0064 | 28.74 | 1.184 | 5.353  | 2.4870 | -0.01692 | -0.01233 | -0.04838 | -0.00680 | -0.00496 | -0.01945 | 0.00862  | 0.00775  | 0.00501 |
| 9235  | 2020.03 | 124.1 | 3.51 | 0.26  | 0.0070 | 0.0090 | 28.86 | 1.183 | 5.477  | 2.4871 | -0.01683 | -0.01359 | -0.04795 | -0.00677 | -0.00547 | -0.01928 | 0.00866  | 0.00724  | 0.00518 |
| 9236  | 2019.89 | 124.0 | 3.51 | 0.28  | 0.0108 | 0.0064 | 28.98 | 1.184 | 5.588  | 2.4863 | -0.01459 | -0.01266 | -0.04752 | -0.00587 | -0.00509 | -0.01911 | 0.00956  | 0.00761  | 0.00535 |
| 9237  | 2020.03 | 124.0 | 3.51 | 0.27  | 0.0101 | 0.0079 | 29.11 | 1.184 | 5.720  | 2.4866 | -0.01617 | -0.01156 | -0.04682 | -0.00693 | -0.00465 | -0.01883 | 0.00849  | 0.00806  | 0.00564 |
| 9238  | 2020.03 | 124.0 | 3.51 | 0.27  | 0.0111 | 0.0094 | 29.23 | 1.184 | 5.842  | 2.4867 | -0.01813 | -0.01292 | -0.04585 | -0.00729 | -0.00519 | -0.01844 | 0.00813  | 0.00751  | 0.00603 |
| 9239  | 2020.18 | 124.1 | 3.51 | 0.28  | 0.0094 | 0.0084 | 29.36 | 1.185 | 5.959  | 2.4873 | -0.01832 | -0.01398 | -0.04602 | -0.00736 | -0.00562 | -0.01850 | 0.00806  | 0.00708  | 0.00596 |
| 9240  | 2019.74 | 124.3 | 3.51 | 0.27  | 0.0108 | 0.0055 | 29.49 | 1.184 | 6.090  | 2.4855 | -0.01649 | -0.01067 | -0.04567 | -0.00663 | -0.00429 | -0.01838 | 0.00879  | 0.00841  | 0.00609 |
| 9241  | 2019.89 | 124.2 | 3.51 | 0.27  | 0.0056 | 0.0110 | 29.61 | 1.184 | 6.231  | 2.4853 | -0.01724 | -0.00907 | -0.04585 | -0.00694 | -0.00365 | -0.01845 | 0.00849  | 0.00905  | 0.00601 |
| 9242  | 2020.03 | 124.1 | 3.51 | 0.28  | 0.0087 | 0.0062 | 29.74 | 1.184 | 6.336  | 2.4888 | -0.01979 | -0.00866 | -0.05056 | -0.00795 | -0.00348 | -0.02031 | 0.00747  | 0.00922  | 0.00415 |
| 9243  | 2019.60 | 124.2 | 3.51 | 0.28  | 0.0108 | 0.0027 | 29.86 | 1.185 | 6.457  | 2.4849 | -0.01401 | -0.00368 | -0.04667 | -0.00564 | -0.00148 | -0.01878 | 0.00978  | 0.01122  | 0.00568 |
| 9244  | 2019.60 | 124.1 | 3.51 | 0.28  | 0.0087 | 0.0043 | 29.99 | 1.184 | 6.593  | 2.4854 | -0.01383 | -0.00440 | -0.04487 | -0.00556 | -0.00177 | -0.01805 | 0.00986  | 0.01093  | 0.00641 |
| 9245  | 2020.03 | 123.8 | 3.51 | 0.28  | 0.0098 | 0.0049 | 30.11 | 1.184 | 6.719  | 2.4863 | -0.01208 | -0.00449 | -0.04275 | -0.00486 | -0.00181 | -0.01719 | 0.01056  | 0.01090  | 0.00727 |
| 9246  | 2020.46 | 123.8 | 3.51 | 0.28  | 0.0118 | 0.0023 | 30.24 | 1.185 | 6.836  | 2.4871 | -0.01074 | -0.00352 | -0.04079 | -0.00432 | -0.00142 | -0.01640 | 0.01110  | 0.01129  | 0.00807 |
| 9247  | 2019.89 | 123.9 | 3.51 | 0.28  | 0.0094 | 0.0038 | 30.36 | 1.184 | 6.969  | 2.4860 | -0.00987 | -0.00223 | -0.04006 | -0.00397 | -0.00090 | -0.01611 | 0.01145  | 0.01181  | 0.00835 |
| 9248  | 2020.03 | 124.0 | 3.51 | 0.28  | 0.0104 | 0.0025 | 30.48 | 1.185 | 7.081  | 2.4871 | -0.00946 | -0.00134 | -0.04138 | -0.00380 | -0.00054 | -0.01664 | 0.01162  | 0.01216  | 0.00783 |
| 9249  | 2020.32 | 123.9 | 3.51 | 0.28  | 0.0111 | 0.0029 | 30.68 | 1.184 | 7.283  | 2.4870 | -0.00897 | -0.00107 | -0.04214 | -0.00361 | -0.00043 | -0.01694 | 0.01182  | 0.01228  | 0.00752 |
| 9250  | 2019.74 | 123.7 | 3.51 | 0.27  | 0.0098 | 0.0040 | 30.74 | 1.184 | 7.344  | 2.4853 | -0.00829 | -0.00069 | -0.04117 | -0.00334 | -0.00028 | -0.01656 | 0.01209  | 0.01243  | 0.00790 |
| 9251  | 2019.89 | 124.0 | 3.51 | 0.28  | 0.0104 | 0.0034 | 30.86 | 1.184 | 7.463  | 2.4865 | -0.00773 | -0.00063 | -0.04042 | -0.00311 | -0.00025 | -0.01626 | 0.01231  | 0.01245  | 0.00821 |
| 9252  | 2020.18 | 124.0 | 3.51 | 0.28  | 0.0094 | 0.0047 | 30.99 | 1.184 | 7.594  | 2.4881 | -0.01120 | -0.00335 | -0.04375 | -0.00450 | -0.00135 | -0.01758 | 0.01092  | 0.01136  | 0.00688 |
| 9253  | 2019.60 | 124.2 | 3.51 | 0.27  | 0.0108 | 0.0055 | 31.11 | 1.184 | 7.723  | 2.4851 | -0.00543 | -0.00035 | -0.04195 | -0.00218 | -0.00014 | -0.01688 | 0.01324  | 0.01256  | 0.00758 |
| 9254  | 2019.89 | 124.1 | 3.51 | 0.27  | 0.0108 | 0.0017 | 31.23 | 1.184 | 7.845  | 2.4878 | -0.00730 | -0.00560 | -0.04240 | -0.00293 | -0.00225 | -0.01704 | 0.01249  | 0.01046  | 0.00742 |
| 9255  | 2020.18 | 123.9 | 3.51 | 0.29  | 0.0125 | 0.0083 | 31.36 | 1.185 | 7.954  | 2.4865 | -0.00451 | -0.00480 | -0.03879 | -0.00181 | -0.00193 | -0.01560 | 0.01361  | 0.01077  | 0.00886 |
| 9256  | 2020.03 | 123.9 | 3.51 | 0.27  | 0.0097 | 0.0086 | 31.48 | 1.184 | 8.094  | 2.4858 | -0.00698 | -0.00840 | -0.03825 | -0.00281 | -0.00338 | -0.01539 | 0.01262  | 0.00933  | 0.00908 |
| 9257  | 2019.74 | 123.7 | 3.51 | 0.27  | 0.0094 | 0.0084 | 31.61 | 1.184 | 8.218  | 2.4871 | -0.01089 | -0.01226 | -0.03690 | -0.00438 | -0.00493 | -0.01483 | 0.01104  | 0.00778  | 0.00963 |
| 9258  | 2019.89 | 123.9 | 3.51 | 0.27  | 0.0111 | 0.0056 | 31.74 | 1.184 | 8.344  | 2.4877 | -0.01355 | -0.01531 | -0.03838 | -0.00545 | -0.00615 | -0.01543 | 0.00998  | 0.00655  | 0.00904 |
| 9259  | 2020.18 | 124.1 | 3.51 | 0.27  | 0.0097 | 0.0105 | 31.86 | 1.184 | 8.472  | 2.4871 | -0.01615 | -0.01576 | -0.03620 | -0.00650 | -0.00634 | -0.01456 | 0.00893  | 0.00637  | 0.00991 |
| 9260  | 2020.46 | 124.0 | 3.51 | 0.27  | 0.0101 | 0.0069 | 31.99 | 1.184 | 8.601  | 2.4867 | -0.01801 | -0.01609 | -0.03612 | -0.00724 | -0.00647 | -0.01453 | 0.00818  | 0.00623  | 0.00994 |
| 9261  | 2020.46 | 124.1 | 3.51 | 0.28  | 0.0115 | 0.0068 | 32.11 | 1.184 | 8.714  | 2.4870 | -0.02108 | -0.01918 | -0.03615 | -0.00848 | -0.00771 | -0.01453 | 0.00695  | 0.00499  | 0.00993 |
| 9262  | 2019.89 | 124.1 | 3.51 | 0.29  | 0.0125 | 0.0064 | 32.24 | 1.185 | 8.830  | 2.4868 | -0.02235 | -0.02286 | -0.03559 | -0.00899 | -0.00919 | -0.01431 | 0.00643  | 0.00351  | 0.01015 |
| 9263  | 2019.74 | 124.2 | 3.51 | 0.28  | 0.0097 | 0.0068 | 32.36 | 1.184 | 8.962  | 2.4866 | -0.02627 | -0.02984 | -0.03631 | -0.01056 | -0.01200 | -0.01460 | 0.00486  | 0.00070  | 0.00986 |
| 9264  | 2020.03 | 124.1 | 3.51 | 0.27  | 0.0070 | 0.0080 | 32.49 | 1.184 | 9.099  | 2.4870 | -0.02992 | -0.03532 | -0.03793 | -0.01203 | -0.01420 | -0.01525 | 0.00339  | 0.00150  | 0.00921 |
| 9265  | 2020.61 | 124.0 | 3.51 | 0.28  | 0.0111 | 0.0056 | 32.61 | 1.184 | 9.211  | 2.4866 | -0.03082 | -0.03822 | -0.03391 | -0.01240 | -0.01537 | -0.01364 | 0.00303  | -0.00267 | 0.01083 |
| 9266  | 2020.75 | 124.1 | 3.51 | 0.28  | 0.0115 | 0.0077 | 32.74 | 1.184 | 9.342  | 2.4874 | -0.03690 | -0.04618 | -0.03333 | -0.01484 | -0.01857 | -0.01340 | 0.00059  | -0.00586 | 0.01107 |
| 9267  | 2019.89 | 124.1 | 3.51 | 0.27  | 0.0087 | 0.0053 | 32.86 | 1.184 | 9.467  | 2.4869 | -0.04304 | -0.05159 | -0.03633 | -0.01731 | -0.02074 | -0.01461 | -0.00188 | -0.00804 | 0.00985 |
| 9268  | 2019.74 | 124.1 | 3.51 | 0.27  | 0.0115 | 0.0077 | 32.99 | 1.184 | 9.597  | 2.4861 | -0.04666 | -0.05567 | -0.03529 | -0.01877 | -0.02239 | -0.01419 | -0.00334 | -0.00969 | 0.01027 |
| 9269  | 2019.89 | 123.9 | 3.51 | 0.28  | 0.0084 | 0.0079 | 33.11 | 1.184 | 9.709  | 2.4870 | -0.05410 | -        |          |          |          |          |          |          |         |

Table A12. Concluded.

Run = 142

M = 1.80

xsppos = 42.348

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 9289  | 2020.03 | 124.2 | 3.51 | 0.28  | 0.0084 | 0.0014 | 35.61 | 1.185 | 12.211 | 2.4864 | -0.04595 | -0.03529 | -0.08975 | -0.01848 | -0.01419 | -0.03609 | -0.00306 | -0.00149 | -0.01163 |
| 9290  | 2020.03 | 124.1 | 3.51 | 0.27  | 0.0084 | 0.0032 | 35.74 | 1.184 | 12.349 | 2.4859 | -0.04289 | -0.03357 | -0.08224 | -0.01725 | -0.01350 | -0.03308 | -0.00183 | -0.00080 | -0.00862 |
| 9291  | 2020.03 | 124.0 | 3.51 | 0.27  | 0.0101 | 0.0004 | 35.86 | 1.184 | 12.471 | 2.4861 | -0.04100 | -0.03195 | -0.08029 | -0.01649 | -0.01285 | -0.03230 | -0.00107 | -0.00015 | -0.00783 |
| 9292  | 2020.18 | 123.9 | 3.51 | 0.28  | 0.0087 | 0.0025 | 35.99 | 1.184 | 12.593 | 2.4864 | -0.04022 | -0.03121 | -0.08029 | -0.01618 | -0.01255 | -0.03229 | -0.00075 | 0.00015  | -0.00783 |
| 9293  | 2020.18 | 124.0 | 3.51 | 0.26  | 0.0060 | 0.0075 | 36.11 | 1.183 | 12.732 | 2.4864 | -0.03944 | -0.03022 | -0.07698 | -0.01586 | -0.01216 | -0.03096 | -0.00044 | 0.00055  | -0.00650 |
| 9294  | 2020.32 | 124.1 | 3.51 | 0.27  | 0.0098 | 0.0040 | 36.23 | 1.184 | 12.847 | 2.4872 | -0.04033 | -0.03087 | -0.07575 | -0.01622 | -0.01241 | -0.03045 | -0.00079 | 0.00029  | -0.00599 |
| 9295  | 2019.89 | 124.0 | 3.51 | 0.27  | 0.0084 | 0.0023 | 36.36 | 1.184 | 12.973 | 2.4873 | -0.03929 | -0.03160 | -0.07305 | -0.01580 | -0.01271 | -0.02937 | -0.00037 | 0.00000  | -0.00490 |
| 9296  | 2019.89 | 123.9 | 3.51 | 0.26  | 0.0077 | 0.0056 | 36.49 | 1.184 | 13.103 | 2.4862 | -0.03858 | -0.03174 | -0.06696 | -0.01552 | -0.01277 | -0.02693 | -0.00009 | -0.00006 | -0.00247 |
| 9297  | 2020.03 | 124.0 | 3.51 | 0.27  | 0.0080 | 0.0067 | 36.61 | 1.184 | 13.226 | 2.4864 | -0.03914 | -0.03267 | -0.06541 | -0.01574 | -0.01314 | -0.02631 | -0.00032 | -0.00043 | -0.00184 |
| 9298  | 2020.18 | 124.1 | 3.51 | 0.26  | 0.0060 | 0.0084 | 36.74 | 1.183 | 13.359 | 2.4864 | -0.03768 | -0.03279 | -0.06258 | -0.01515 | -0.01319 | -0.02517 | 0.00027  | -0.00048 | -0.00071 |
| 9299  | 2019.74 | 124.1 | 3.51 | 0.28  | 0.0101 | 0.0032 | 36.86 | 1.184 | 13.463 | 2.4860 | -0.03757 | -0.03492 | -0.06377 | -0.01511 | -0.01405 | -0.02565 | 0.00031  | -0.00134 | -0.00119 |
| 9300  | 2020.03 | 123.9 | 3.51 | 0.27  | 0.0091 | 0.0092 | 36.98 | 1.184 | 13.592 | 2.4862 | -0.03868 | -0.03619 | -0.06400 | -0.01556 | -0.01455 | -0.02574 | -0.00013 | -0.00185 | -0.00128 |
| 9301  | 2019.89 | 123.9 | 3.51 | 0.26  | 0.0046 | 0.0095 | 37.11 | 1.183 | 13.736 | 2.4864 | -0.03998 | -0.03767 | -0.06430 | -0.01608 | -0.01515 | -0.02586 | -0.00066 | -0.00245 | -0.00140 |
| 9302  | 2020.18 | 123.9 | 3.51 | 0.27  | 0.0077 | 0.0075 | 37.24 | 1.184 | 13.851 | 2.4865 | -0.04066 | -0.03907 | -0.06511 | -0.01635 | -0.01571 | -0.02619 | -0.00093 | -0.00301 | -0.00172 |
| 9303  | 2020.18 | 123.8 | 3.51 | 0.26  | 0.0077 | 0.0075 | 37.36 | 1.183 | 13.980 | 2.4866 | -0.04303 | -0.03960 | -0.06423 | -0.01731 | -0.01593 | -0.02583 | -0.00188 | -0.00322 | -0.00137 |
| 9304  | 2020.03 | 123.9 | 3.51 | 0.26  | 0.0091 | 0.0082 | 37.48 | 1.183 | 14.103 | 2.4867 | -0.04362 | -0.03998 | -0.06619 | -0.01754 | -0.01608 | -0.02662 | -0.00212 | -0.00337 | -0.00215 |
| 9305  | 2019.89 | 124.1 | 3.51 | 0.27  | 0.0101 | 0.0023 | 37.61 | 1.184 | 14.217 | 2.4865 | -0.04565 | -0.03724 | -0.06733 | -0.01836 | -0.01498 | -0.02708 | -0.00294 | -0.00227 | -0.00262 |
| 9306  | 2019.89 | 124.2 | 3.51 | 0.28  | 0.0091 | 0.0036 | 37.74 | 1.184 | 14.337 | 2.4871 | -0.04674 | -0.03189 | -0.06715 | -0.01879 | -0.01282 | -0.02700 | -0.00337 | -0.00012 | -0.00253 |
| 9307  | 2019.89 | 124.1 | 3.51 | 0.27  | 0.0084 | 0.0051 | 37.86 | 1.184 | 14.474 | 2.4872 | -0.04470 | -0.03015 | -0.06658 | -0.01797 | -0.01212 | -0.02677 | -0.00255 | 0.00058  | -0.00230 |
| 9308  | 2020.32 | 124.1 | 3.51 | 0.28  | 0.0084 | 0.0069 | 37.99 | 1.184 | 14.592 | 2.4874 | -0.04159 | -0.03025 | -0.06684 | -0.01672 | -0.01216 | -0.02687 | -0.00130 | 0.00054  | -0.00241 |
| 9309  | 2020.03 | 123.8 | 3.51 | 0.27  | 0.0080 | 0.0058 | 38.11 | 1.184 | 14.725 | 2.4871 | -0.03643 | -0.03229 | -0.06755 | -0.01465 | -0.01298 | -0.02716 | 0.00078  | -0.00028 | -0.00269 |
| 9310  | 2020.18 | 123.8 | 3.51 | 0.26  | 0.0087 | 0.0099 | 38.24 | 1.183 | 14.855 | 2.4868 | -0.03442 | -0.02751 | -0.06670 | -0.01384 | -0.01359 | -0.02682 | 0.00158  | -0.00089 | -0.00236 |
| 9311  | 2020.46 | 123.6 | 3.51 | 0.28  | 0.0084 | 0.0088 | 38.36 | 1.184 | 14.969 | 2.4866 | -0.03516 | -0.03688 | -0.06624 | -0.01414 | -0.01483 | -0.02664 | 0.00128  | -0.00213 | -0.00217 |
| 9312  | 2019.74 | 123.8 | 3.51 | 0.28  | 0.0087 | 0.0071 | 38.49 | 1.184 | 15.094 | 2.4864 | -0.03755 | -0.03875 | -0.06537 | -0.01510 | -0.01558 | -0.02629 | 0.00032  | -0.00288 | -0.00182 |
| 9313  | 2019.89 | 124.1 | 3.51 | 0.27  | 0.0094 | 0.0056 | 38.61 | 1.184 | 15.223 | 2.4865 | -0.04120 | -0.03671 | -0.06649 | -0.01657 | -0.01476 | -0.02674 | -0.00115 | -0.00206 | -0.00228 |
| 9314  | 2020.18 | 123.9 | 3.51 | 0.27  | 0.0087 | 0.0071 | 38.74 | 1.184 | 15.348 | 2.4868 | -0.04467 | -0.03598 | -0.06779 | -0.01796 | -0.01447 | -0.02726 | -0.00254 | -0.00176 | -0.00280 |
| 9315  | 2019.89 | 124.1 | 3.51 | 0.27  | 0.0080 | 0.0067 | 38.86 | 1.184 | 15.475 | 2.4872 | -0.04723 | -0.03030 | -0.06907 | -0.01899 | -0.01218 | -0.02777 | -0.00356 | 0.00052  | -0.00331 |
| 9316  | 2020.03 | 124.0 | 3.51 | 0.27  | 0.0084 | 0.0041 | 38.99 | 1.184 | 15.599 | 2.4873 | -0.04412 | -0.02751 | -0.07047 | -0.01774 | -0.01106 | -0.02833 | -0.00232 | 0.00164  | -0.00387 |
| 9317  | 2019.74 | 123.8 | 3.51 | 0.27  | 0.0080 | 0.0077 | 39.11 | 1.184 | 15.724 | 2.4867 | -0.04016 | -0.02765 | -0.07155 | -0.01615 | -0.01112 | -0.02877 | -0.00073 | 0.00159  | -0.00431 |
| 9318  | 2020.03 | 124.1 | 3.51 | 0.28  | 0.0097 | 0.0095 | 39.23 | 1.184 | 15.835 | 2.4865 | -0.03743 | -0.02634 | -0.07197 | -0.01505 | -0.01059 | -0.02895 | 0.00037  | 0.00211  | -0.00448 |
| 9319  | 2020.32 | 124.1 | 3.51 | 0.27  | 0.0084 | 0.0079 | 39.36 | 1.184 | 15.973 | 2.4878 | -0.03405 | -0.02730 | -0.06998 | -0.01369 | -0.01097 | -0.02813 | 0.00174  | 0.00173  | -0.00366 |
| 9320  | 2020.32 | 124.0 | 3.51 | 0.27  | 0.0101 | 0.0079 | 39.49 | 1.184 | 16.097 | 2.4874 | -0.03279 | -0.02657 | -0.06675 | -0.01318 | -0.01068 | -0.02684 | 0.00224  | 0.00202  | -0.00237 |
| 9321  | 2019.60 | 124.2 | 3.51 | 0.27  | 0.0060 | 0.0084 | 39.61 | 1.184 | 16.229 | 2.4866 | -0.03306 | -0.02795 | -0.06009 | -0.01330 | -0.01124 | -0.02417 | 0.00213  | 0.00146  | 0.00030  |
| 9322  | 2020.32 | 124.2 | 3.51 | 0.27  | 0.0063 | 0.0086 | 39.74 | 1.184 | 16.346 | 2.4877 | -0.03437 | -0.02818 | -0.05839 | -0.01382 | -0.01133 | -0.02347 | 0.00161  | 0.00138  | 0.00099  |
| 9323  | 2019.60 | 124.1 | 3.51 | 0.27  | 0.0073 | 0.0101 | 39.86 | 1.184 | 16.472 | 2.4866 | -0.03490 | -0.02936 | -0.05968 | -0.01404 | -0.01181 | -0.02400 | 0.00139  | 0.00090  | 0.00046  |
| 9324  | 2020.18 | 124.1 | 3.51 | 0.26  | 0.0080 | 0.0067 | 39.99 | 1.183 | 16.609 | 2.4867 | -0.03451 | -0.02884 | -0.06289 | -0.01388 | -0.01160 | -0.02529 | 0.00155  | 0.00111  | -0.00082 |
| 9325  | 2020.18 | 124.1 | 3.51 | 0.27  | 0.0094 | 0.0056 | 40.11 | 1.184 | 16.722 | 2.4870 | -0.03449 | -0.02906 | -0.06511 | -0.01387 | -0.01168 | -0.02618 | 0.00155  | 0.00102  | -0.00172 |
| 9326  | 2020.03 | 124.1 | 3.51 | 0.28  | 0.0091 | 0.0036 | 40.24 | 1.184 | 16.841 | 2.4855 | -0.03302 | -0.02846 | -0.06780 | -0.01328 | -0.01145 | -0.02728 | 0.00214  | 0.00125  | -0.00281 |
| 9327  | 2019.89 | 124.1 | 3.51 | 0.30  | 0.0094 | 0.0056 | 40.36 | 1.185 | 16.947 | 2.4866 | -0.03520 | -0.02910 | -0.07100 | -0.01416 | -0.01170 | -0.02855 | 0.00127  | 0.00100  | -0.00409 |
| 9328  | 2019.89 | 124.0 | 3.51 | 0.27  | 0.0056 | 0.0091 | 40.49 | 1.184 | 17.098 | 2.4868 | -0.03619 | -0.02986 | -0.07046 | -0.01455 | -0.01201 | -0.02833 | 0.00087  | 0.00070  | -0.00387 |
| 9329  | 2020.32 | 124.0 | 3.51 | 0.28  | 0.0070 | 0.0062 | 40.61 | 1.184 | 17.216 | 2.4874 | -0.03609 | -0.03188 | -0.06665 | -0.01451 | -0.01281 | -0.02679 | 0.00091  | -0.00011 | -0.00233 |
| 9330  | 2019.60 | 124.2 | 3.51 | 0.26  | 0.0046 | 0.0086 | 40.73 | 1.183 | 17.364 | 2.4873 | -0.03808 | -0.03074 | -0.06054 | -0.01531 | -0.01236 | -0.02434 | 0.00012  | 0.00035  | 0.00013  |
| 9331  | 2019.74 | 124.0 | 3.51 | 0.27  | 0.0091 | 0.0055 | 40.86 | 1.184 | 17.474 | 2.4862 | -0.03621 | -0.03024 | -0.05715 | -0.01457 | -0.01216 | -0.02299 | 0.00086  | 0.00054  | 0.00148  |
| 9332  | 2020.03 | 123.8 | 3.51 | 0.27  | 0.0073 | 0.0101 | 40.99 | 1.184 | 17.600 | 2.4866 | -0.03565 | -0.02949 | -0.05684 | -0.01433 | -0.01186 | -0.02286 | 0.00109  | 0.00085  | 0.00161  |
| 9333  | 2019.74 | 123.9 | 3.51 | 0.26  | 0.0074 | 0.0054 | 41.11 | 1.183 | 17.733 | 2.4866 | -0.03580 | -0.02958 | -0.05609 | -0.01440 | -0.01190 | -0.02256 | 0.00103  | 0.00081  | 0.00191  |
| 9334  | 2020.18 | 124.0 | 3.51 | 0.27  | 0.0067 | 0.0060 | 41.24 | 1.184 | 17.852 | 2.4864 | -0.03479 | -0.02922 | -0.05663 | -0.01399 | -0.01175 | -0.02278 | 0.00143  | 0.00095  | 0.00169  |
| 9335  | 2020.18 | 123.9 | 3.51 | 0.27  | 0.0080 | 0.0002 | 41.36 | 1.184 | 17.966 | 2.4859 | -0.03450 | -0.02737 | -0.05640 | -0.01388 | -0.01101 | -0.02269 | 0.00155  | 0.00169  | 0.00178  |
| 9336  | 2020.18 | 124.2 | 3.51 | 0.27  | 0.0060 | 0.0047 | 41.49 | 1.183 | 18.105 | 2.4872 | -0.03648 | -0.02931 | -0.05834 | -0.01467 | -0.01179 | -0.02346 | 0.00075  | 0.00092  | 0.00101  |
| 9337  | 2020.18 | 124.1 | 3.51 | 0.27  | 0.0070 | 0.0025 | 41.61 | 1.184 | 18.221 | 2.4867 | -0.03546 | -0.02957 | -0.05807 | -0.01426 | -0.01189 | -0.02335 | 0.00116  | 0.00081  | 0.00111  |
| 9338  | 2020.32 | 124.1 | 3.51 | 0.27  | 0.0084 | 0.0032 | 41.73 | 1.184 | 18.343 | 2.4878 | -0.03596 | -0.03058 | -0.06037 | -0.01446 | -0.01229 | -0.02427 | 0.00097  | 0.00041  | 0.00020  |
| 9339  | 2020.03 | 123.9 | 3.51 | 0.27  | 0.0080 | 0.0012 | 41.86 | 1.184 | 18.472 | 2.4871 | -0.03621 | -0.02946 | -0.05954 | -0.01456 | -0.01184 | -0.02394 | 0.00086  | 0.00086  | 0.00053  |
| 9340  | 2020.32 | 123.9 | 3.51 | 0.26  | 0.0063 | 0.0077 | 41.98 | 1.183 | 18.609 | 2.4865 | -0.03534 | -0.02841 | -0.05906 | -0.01421 | -0.01143 | -0.02375 | 0.00121  | 0.00128  | 0.00071  |
| 9341  | 2019.60 | 124.1 | 3.51 | 0.28  | 0.0080 | 0.0058 | 42.11 | 1.184 | 18.715 | 2.4866 | -0.03699 | -0.02881 | -0.06051 | -0.01488 | -0.01159 | -0.02433 | 0.00055  | 0.00112  | 0.00013  |
| 9342  | 2020.32 | 124.0 | 3.51 | 0.27  | 0.0084 | 0.0023 |       |       |        |        |          |          |          |          |          |          |          |          |          |

Table A13. Run 143.

Run = 143

M = 1.80

xsppos = 42.348

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc   | x     | h/L   | xhbeta | pref   | dp01       | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|---------|-------|-------|--------|--------|------------|----------|----------|----------|----------|----------|----------|----------|----------|
| 9362  | 2020.03 | 124.1 | 3.51 | 0.64  | 0.0269 | -0.0043 | 17.49 | 1.192 | -6.057 | 2.4878 | -0.03902   | -0.03324 | -0.06185 | -0.01568 | -0.01336 | -0.02486 | -0.00022 | -0.00073 | -0.00047 |
| 9363  | 2019.89 | 124.1 | 3.51 | 0.63  | 0.0276 | -0.0058 | 17.61 | 1.191 | -5.924 | 2.4872 | -0.03762   | -0.03245 | -0.06089 | -0.01513 | -0.01305 | -0.02448 | 0.00034  | -0.00041 | -0.00009 |
| 9364  | 2020.18 | 124.0 | 3.51 | 0.63  | 0.0276 | -0.0021 | 17.74 | 1.191 | -5.798 | 2.4866 | -0.03824   | -0.03127 | -0.06048 | -0.01538 | -0.01258 | -0.02432 | 0.00008  | 0.00006  | 0.00007  |
| 9365  | 2019.89 | 124.1 | 3.51 | 0.62  | 0.0238 | 0.0014  | 17.86 | 1.191 | -5.663 | 2.4859 | -0.03860   | -0.02998 | -0.05965 | -0.01553 | -0.01206 | -0.02399 | -0.00006 | 0.00058  | 0.00040  |
| 9366  | 2019.74 | 123.9 | 3.51 | 0.63  | 0.0262 | -0.0038 | 17.86 | 1.191 | -5.674 | 2.4863 | -0.03880   | -0.03015 | -0.06042 | -0.01561 | -0.01213 | -0.02430 | -0.00014 | 0.00051  | 0.00009  |
| 9367  | 2020.32 | 123.8 | 3.51 | 0.63  | 0.0262 | -0.0019 | 17.99 | 1.191 | -5.543 | 2.4878 | -0.03875   | -0.03261 | -0.06186 | -0.01558 | -0.01311 | -0.02486 | -0.00011 | -0.00047 | -0.00047 |
| 9368  | 2020.03 | 124.2 | 3.51 | 0.63  | 0.0255 | 0.0005  | 18.11 | 1.191 | -5.420 | 2.4871 | -0.03895   | -0.03169 | -0.06150 | -0.01566 | -0.01274 | -0.02473 | -0.00020 | -0.00011 | -0.00033 |
| 9369  | 2019.89 | 124.1 | 3.51 | 0.63  | 0.0245 | 0.0037  | 18.24 | 1.191 | -5.292 | 2.4874 | -0.03864   | -0.03247 | -0.06196 | -0.01553 | -0.01305 | -0.02491 | -0.00007 | -0.00042 | -0.00052 |
| 9370  | 2019.89 | 124.0 | 3.51 | 0.64  | 0.0238 | 0.0061  | 18.36 | 1.191 | -5.174 | 2.4868 | -0.03926   | -0.03198 | -0.06136 | -0.01579 | -0.01286 | -0.02467 | -0.00032 | -0.00023 | -0.00028 |
| 9371  | 2020.32 | 123.7 | 3.51 | 0.63  | 0.0245 | 0.0018  | 18.49 | 1.191 | -5.044 | 2.4868 | -0.03960   | -0.03001 | -0.06086 | -0.01593 | -0.01207 | -0.02447 | -0.00046 | 0.00057  | -0.00008 |
| 9372  | 2020.18 | 123.8 | 3.51 | 0.63  | 0.0245 | -0.0010 | 18.61 | 1.191 | -4.921 | 2.4875 | -0.03897   | -0.03178 | -0.06122 | -0.01566 | -0.01278 | -0.02461 | -0.00020 | -0.00014 | -0.00022 |
| 9373  | 2020.18 | 123.9 | 3.51 | 0.63  | 0.0265 | -0.0017 | 18.74 | 1.191 | -4.798 | 2.4867 | -0.03749   | -0.03093 | -0.06098 | -0.01508 | -0.01244 | -0.02452 | 0.00039  | 0.00020  | -0.00013 |
| 9374  | 2020.18 | 123.9 | 3.51 | 0.63  | 0.0241 | -0.0002 | 18.86 | 1.191 | -4.669 | 2.4861 | -0.03770   | -0.03027 | -0.06025 | -0.01516 | -0.01218 | -0.02424 | 0.00030  | 0.00046  | 0.00016  |
| 9375  | 2020.32 | 123.9 | 3.51 | 0.63  | 0.0245 | -0.0028 | 18.99 | 1.191 | -4.546 | 2.4873 | -0.03859   | -0.03198 | -0.06086 | -0.01551 | -0.01286 | -0.02447 | -0.00005 | -0.00022 | -0.00008 |
| 9376  | 2019.89 | 123.9 | 3.51 | 0.63  | 0.0269 | -0.0015 | 19.11 | 1.191 | -4.421 | 2.4872 | -0.03808   | -0.03279 | -0.06184 | -0.01531 | -0.01318 | -0.02486 | 0.00015  | -0.00055 | -0.00047 |
| 9377  | 2019.89 | 124.0 | 3.51 | 0.62  | 0.0276 | -0.0058 | 19.24 | 1.191 | -4.293 | 2.4880 | -0.03936   | -0.03252 | -0.06299 | -0.01582 | -0.01307 | -0.02532 | -0.00035 | -0.00044 | -0.00092 |
| 9378  | 2019.74 | 123.9 | 3.51 | 0.63  | 0.0228 | -0.0047 | 19.36 | 1.191 | -4.166 | 2.4870 | -0.03862   | -0.03183 | -0.06136 | -0.01553 | -0.01280 | -0.02467 | -0.00006 | -0.00017 | -0.00028 |
| 9379  | 2020.03 | 124.1 | 3.51 | 0.63  | 0.0259 | -0.0039 | 19.49 | 1.191 | -4.049 | 2.4870 | -0.03865   | -0.03139 | -0.06108 | -0.01554 | -0.01262 | -0.02456 | -0.00008 | 0.00001  | -0.00017 |
| 9380  | 2020.03 | 124.0 | 3.51 | 0.63  | 0.0259 | -0.0058 | 19.61 | 1.191 | -3.921 | 2.4865 | -0.03948   | -0.03057 | -0.06080 | -0.01554 | -0.01188 | -0.02445 | -0.00008 | 0.00075  | -0.00006 |
| 9381  | 2019.89 | 124.1 | 3.51 | 0.62  | 0.0265 | -0.0036 | 19.73 | 1.191 | -3.793 | 2.4881 | -0.03888   | -0.03221 | -0.06203 | -0.01563 | -0.01294 | -0.02493 | -0.00016 | -0.00031 | -0.00054 |
| 9382  | 2020.46 | 124.1 | 3.51 | 0.63  | 0.0262 | -0.0047 | 19.86 | 1.191 | -3.669 | 2.4879 | -0.03856   | -0.03157 | -0.06186 | -0.01550 | -0.01269 | -0.02486 | -0.00003 | -0.00006 | -0.00047 |
| 9383  | 2019.60 | 124.0 | 3.51 | 0.63  | 0.0255 | -0.0051 | 19.99 | 1.191 | -3.548 | 2.4870 | -0.03770   | -0.03249 | -0.06178 | -0.01526 | -0.01306 | -0.02484 | 0.00021  | -0.00043 | -0.00045 |
| 9384  | 2019.74 | 124.0 | 3.51 | 0.63  | 0.0272 | -0.0032 | 20.11 | 1.191 | -3.426 | 2.4862 | -0.03726   | -0.03106 | -0.05987 | -0.01499 | -0.01249 | -0.02408 | 0.00048  | 0.00014  | 0.00031  |
| 9385  | 2020.32 | 124.0 | 3.51 | 0.63  | 0.0248 | 0.0002  | 20.24 | 1.191 | -3.290 | 2.4871 | -0.03832   | -0.03162 | -0.06011 | -0.01541 | -0.01271 | -0.02417 | 0.00006  | -0.00008 | 0.00022  |
| 9386  | 2020.32 | 124.0 | 3.51 | 0.62  | 0.0248 | 0.0002  | 20.36 | 1.191 | -3.161 | 2.4874 | -0.03826   | -0.03097 | -0.06077 | -0.01538 | -0.01245 | -0.02443 | 0.00008  | 0.00018  | -0.00004 |
| 9387  | 2020.18 | 123.9 | 3.51 | 0.63  | 0.0241 | 0.0035  | 20.48 | 1.191 | -3.046 | 2.4866 | -0.03739   | -0.02811 | -0.06064 | -0.01503 | -0.01131 | -0.02439 | 0.00043  | 0.00133  | 0.00001  |
| 9388  | 2020.18 | 124.0 | 3.51 | 0.63  | 0.0252 | 0.0041  | 20.61 | 1.191 | -2.916 | 2.4860 | -0.03655   | -0.02504 | -0.05945 | -0.01470 | -0.01007 | -0.02392 | 0.00076  | 0.00256  | 0.00048  |
| 9389  | 2019.46 | 123.9 | 3.51 | 0.63  | 0.0241 | 0.0007  | 20.73 | 1.191 | -2.795 | 2.4872 | -0.03790   | -0.02893 | -0.06186 | -0.01524 | -0.01163 | -0.02487 | 0.00023  | 0.00100  | -0.00048 |
| 9390  | 2019.46 | 123.8 | 3.51 | 0.62  | 0.0262 | 0.0009  | 20.86 | 1.191 | -2.667 | 2.4864 | -0.03597   | -0.02993 | -0.06050 | -0.01447 | -0.01204 | -0.02433 | 0.00100  | 0.00060  | 0.00006  |
| 9391  | 2019.74 | 123.9 | 3.51 | 0.62  | 0.0241 | 0.0035  | 20.99 | 1.191 | -2.537 | 2.4877 | -0.03390   | -0.03372 | -0.06200 | -0.01363 | -0.01356 | -0.02492 | 0.00184  | -0.00092 | -0.00053 |
| 9392  | 2019.89 | 124.1 | 3.51 | 0.62  | 0.0248 | 0.0029  | 21.11 | 1.191 | -2.414 | 2.4870 | -0.03389   | -0.03280 | -0.06094 | -0.01363 | -0.01319 | -0.02450 | 0.00184  | -0.00055 | -0.00011 |
| 9393  | 2019.89 | 124.2 | 3.51 | 0.62  | 0.0259 | -0.0002 | 21.24 | 1.191 | -2.289 | 2.4862 | -0.03583   | -0.03238 | -0.05949 | -0.01441 | -0.01302 | -0.02393 | 0.00105  | -0.00039 | 0.00047  |
| 9394  | 2019.74 | 124.2 | 3.51 | 0.62  | 0.0241 | 0.0054  | 21.36 | 1.191 | -2.163 | 2.4877 | -0.03992   | -0.03147 | -0.06166 | -0.01605 | -0.01265 | -0.02478 | -0.00058 | -0.00002 | -0.00039 |
| 9395  | 2020.18 | 124.1 | 3.51 | 0.62  | 0.0248 | 0.0039  | 21.49 | 1.191 | -2.033 | 2.4865 | -0.03948   | -0.02531 | -0.06092 | -0.01588 | -0.01018 | -0.02450 | 0.00246  | 0.00041  | -0.00011 |
| 9396  | 2020.03 | 123.6 | 3.51 | 0.63  | 0.0255 | 0.0042  | 21.61 | 1.191 | -1.919 | 2.4873 | -0.03916   | -0.02425 | -0.06145 | -0.01574 | -0.00975 | -0.02471 | -0.00028 | 0.00289  | -0.00031 |
| 9397  | 2019.74 | 123.9 | 3.51 | 0.63  | 0.0255 | -0.0004 | 21.74 | 1.191 | -1.792 | 2.4858 | -0.03732   | -0.02055 | -0.06008 | -0.01501 | -0.00827 | -0.02417 | 0.00045  | 0.00437  | 0.00022  |
| 9398  | 2020.03 | 124.0 | 3.51 | 0.63  | 0.0245 | 0.0018  | 21.86 | 1.191 | -1.666 | 2.4870 | -0.03322   | -0.02315 | -0.06071 | -0.01336 | -0.00931 | -0.02441 | 0.00211  | 0.00332  | -0.00002 |
| 9399  | 2020.18 | 124.1 | 3.51 | 0.63  | 0.0238 | 0.0005  | 21.99 | 1.191 | -1.548 | 2.4876 | -0.02948   | -0.02755 | -0.06158 | -0.01185 | -0.01108 | -0.02475 | 0.00361  | 0.00156  | -0.00036 |
| 9400  | 2020.03 | 124.0 | 3.51 | 0.61  | 0.0210 | 0.0065  | 22.11 | 1.190 | -1.400 | 2.4870 | -0.02815   | -0.03140 | -0.06112 | -0.01132 | -0.01263 | -0.02458 | 0.00415  | 0.00001  | -0.00018 |
| 9401  | 2020.03 | 124.1 | 3.51 | 0.63  | 0.0241 | 0.0026  | 22.24 | 1.191 | -1.295 | 2.4865 | -0.03044   | -0.03243 | -0.06044 | -0.01224 | -0.01304 | -0.02431 | 0.00322  | -0.00041 | 0.00009  |
| 9402  | 2019.46 | 124.1 | 3.51 | 0.62  | 0.0241 | 0.0054  | 22.36 | 1.191 | -1.163 | 2.4880 | -0.03413   | -0.03690 | -0.06112 | -0.01372 | -0.01483 | -0.02457 | 0.00175  | -0.00220 | -0.00017 |
| 9403  | 2020.03 | 123.9 | 3.51 | 0.63  | 0.0248 | 0.0002  | 22.49 | 1.191 | -1.042 | 2.4868 | -0.03715   | -0.03220 | -0.05810 | -0.01494 | -0.01295 | -0.02336 | 0.00052  | -0.00031 | 0.00103  |
| 9404  | 2019.89 | 123.9 | 3.51 | 0.62  | 0.0231 | 0.0048  | 22.61 | 1.191 | -0.909 | 2.4864 | -0.03939   | -0.02468 | -0.05709 | -0.01584 | -0.00993 | -0.02296 | -0.00038 | 0.00271  | 0.00143  |
| 9405  | 2019.74 | 123.8 | 3.51 | 0.62  | 0.0224 | 0.0053  | 22.74 | 1.190 | -0.782 | 2.4869 | -0.04224   | -0.02165 | -0.05850 | -0.01698 | -0.00870 | -0.02352 | -0.00152 | 0.00393  | 0.00087  |
| 9406  | 2019.89 | 124.0 | 3.51 | 0.63  | 0.0245 | 0.0055  | 22.86 | 1.191 | -0.665 | 2.4879 | -0.03885   | -0.01904 | -0.06127 | -0.01561 | -0.00765 | -0.02463 | -0.00015 | 0.00498  | -0.00023 |
| 9407  | 2019.60 | 124.1 | 3.51 | 0.62  | 0.0221 | 0.0080  | 22.99 | 1.190 | -0.528 | 2.4866 | -0.03309   | -0.01935 | -0.06182 | -0.01331 | -0.00778 | -0.02486 | 0.00216  | 0.00485  | -0.00047 |
| 9408  | 2020.18 | 124.0 | 3.51 | 0.62  | 0.0234 | 0.0050  | 23.11 | 1.190 | -0.408 | 2.4867 | -0.02515   | -0.02208 | -0.06103 | -0.01011 | -0.00888 | -0.02454 | 0.00535  | 0.00376  | -0.00015 |
| 9409  | 2019.74 | 124.0 | 3.51 | 0.63  | 0.0255 | 0.0024  | 23.23 | 1.191 | -0.296 | 2.4874 | -0.02615   | -0.02706 | -0.06168 | -0.01051 | -0.01088 | -0.02480 | 0.00495  | 0.00175  | -0.00041 |
| 9410  | 2019.89 | 123.9 | 3.51 | 0.63  | 0.0241 | 0.0072  | 23.36 | 1.191 | -0.167 | 2.4870 | -0.02634   | -0.03028 | -0.05864 | -0.01059 | -0.01217 | -0.02358 | 0.00488  | 0.00046  | 0.00082  |
| 9411  | 2020.03 | 123.9 | 3.51 | 0.63  | 0.0248 | 0.0048  | 23.49 | 1.191 | -0.047 | 2.4875 | -0.03025   | -0.03386 | -0.05581 | -0.01216 | -0.01361 | -0.02244 | 0.00330  | -0.00098 | 0.00196  |
| 9412  | 2020.03 | 123.9 | 3.51 | 0.63  | 0.0217 | 0.0096  | 23.61 | 1.191 | 0.082  | 2.4868 | -0.03562   | -0.02943 | -0.05143 | -0.01432 | -0.01183 | -0.02068 | 0.00114  | 0.00080  | 0.00371  |
| 9413  | 2020.18 | 123.8 | 3.51 | 0.63  | 0.0252 | 0.0041  | 23.74 | 1.191 | 0.203  | 2.4872 | -0.03691   | -0.02691 | -0.05148 | -0.01484 | -0.01082 | -0.02070 | 0.00063  | 0.00181  | 0.00370  |
| 9414  | 2020.03 | 123.8 | 3.51 | 0.63  | 0.0214 | 0.0057  | 23.86 | 1.191 | 0.333  | 2.4875 | -0.03976   | -0.01962 | -0.05615 | -0.01598 | -0.00789 | -0.02257 | -0.00052 | 0.00475  | 0.00182  |
| 9415  | 2020.32 | 123.9 | 3.51 | 0.63  | 0.0234 | 0.0022  | 23.98 | 1.191 | 0.456  | 2.4876 | -0.03888</ |          |          |          |          |          |          |          |          |

Table A13. Continued.

Run = 143

M = 1.80

xsp05 = 42.347

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc   | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c  |
|-------|---------|-------|------|-------|--------|---------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|---------|
| 9435  | 2019.60 | 124.1 | 3.51 | 0.63  | 0.0241 | 0.0016  | 26.49 | 1.191 | 2.954  | 2.4858 | -0.02503 | -0.01665 | -0.05630 | -0.01007 | -0.00670 | -0.02265 | 0.00540  | 0.00594  | 0.00174 |
| 9436  | 2019.60 | 123.8 | 3.51 | 0.63  | 0.0269 | -0.0006 | 26.61 | 1.191 | 3.078  | 2.4862 | -0.02456 | -0.01727 | -0.05567 | -0.00988 | -0.00695 | -0.02239 | 0.00559  | 0.00569  | 0.00200 |
| 9437  | 2019.60 | 123.9 | 3.51 | 0.63  | 0.0245 | 0.0009  | 26.73 | 1.191 | 3.203  | 2.4874 | -0.02519 | -0.01890 | -0.05356 | -0.01013 | -0.00760 | -0.02153 | 0.00534  | 0.00504  | 0.00286 |
| 9438  | 2019.89 | 124.0 | 3.51 | 0.64  | 0.0259 | -0.0030 | 26.86 | 1.192 | 3.315  | 2.4864 | -0.02271 | -0.01679 | -0.04859 | -0.00914 | -0.00675 | -0.01954 | 0.00633  | 0.00588  | 0.00485 |
| 9439  | 2019.89 | 123.9 | 3.51 | 0.63  | 0.0272 | -0.0032 | 26.98 | 1.191 | 3.451  | 2.4864 | -0.02301 | -0.01518 | -0.04622 | -0.00925 | -0.00611 | -0.01859 | 0.00621  | 0.00653  | 0.00580 |
| 9440  | 2020.03 | 124.1 | 3.51 | 0.64  | 0.0252 | -0.0025 | 27.11 | 1.191 | 3.573  | 2.4866 | -0.02325 | -0.01456 | -0.04616 | -0.00935 | -0.00586 | -0.01856 | 0.00611  | 0.00678  | 0.00583 |
| 9441  | 2020.03 | 124.2 | 3.51 | 0.64  | 0.0262 | -0.0038 | 27.24 | 1.192 | 3.693  | 2.4877 | -0.02398 | -0.01655 | -0.04855 | -0.00964 | -0.00665 | -0.01952 | 0.00583  | 0.00598  | 0.00488 |
| 9442  | 2020.18 | 124.2 | 3.51 | 0.63  | 0.0279 | -0.0028 | 27.36 | 1.191 | 3.825  | 2.4859 | -0.02113 | -0.01197 | -0.04666 | -0.00850 | -0.00481 | -0.01877 | 0.00696  | 0.00782  | 0.00562 |
| 9443  | 2020.18 | 124.3 | 3.51 | 0.63  | 0.0265 | -0.0017 | 27.48 | 1.191 | 3.946  | 2.4873 | -0.02117 | -0.01366 | -0.04771 | -0.00851 | -0.00549 | -0.01918 | 0.00695  | 0.00714  | 0.00521 |
| 9444  | 2019.60 | 124.3 | 3.51 | 0.63  | 0.0262 | -0.0028 | 27.61 | 1.191 | 4.072  | 2.4865 | -0.01986 | -0.01496 | -0.04875 | -0.00799 | -0.00602 | -0.01961 | 0.00748  | 0.00662  | 0.00479 |
| 9445  | 2020.32 | 124.1 | 3.51 | 0.63  | 0.0269 | 0.0022  | 27.73 | 1.191 | 4.203  | 2.4876 | -0.02052 | -0.01545 | -0.04946 | -0.00825 | -0.00621 | -0.01988 | 0.00721  | 0.00642  | 0.00451 |
| 9446  | 2019.46 | 124.1 | 3.51 | 0.63  | 0.0272 | -0.0050 | 27.86 | 1.191 | 4.325  | 2.4871 | -0.02118 | -0.01893 | -0.05061 | -0.00852 | -0.00761 | -0.02035 | 0.00695  | 0.00502  | 0.00404 |
| 9447  | 2020.46 | 124.1 | 3.51 | 0.62  | 0.0255 | -0.0004 | 27.98 | 1.191 | 4.458  | 2.4873 | -0.02041 | -0.01747 | -0.04918 | -0.00821 | -0.00703 | -0.01977 | 0.00726  | 0.00561  | 0.00462 |
| 9448  | 2019.89 | 124.1 | 3.51 | 0.63  | 0.0269 | -0.0043 | 28.11 | 1.191 | 4.572  | 2.4875 | -0.02216 | -0.01514 | -0.04983 | -0.00891 | -0.00609 | -0.02003 | 0.00656  | 0.00655  | 0.00436 |
| 9449  | 2020.03 | 124.1 | 3.51 | 0.63  | 0.0262 | -0.0019 | 28.24 | 1.191 | 4.707  | 2.4875 | -0.02259 | -0.01265 | -0.04959 | -0.00908 | -0.00509 | -0.01994 | 0.00638  | 0.00755  | 0.00446 |
| 9450  | 2020.18 | 123.9 | 3.51 | 0.64  | 0.0252 | 0.0022  | 28.36 | 1.191 | 4.822  | 2.4861 | -0.02117 | -0.00949 | -0.04751 | -0.00851 | -0.00382 | -0.01911 | 0.00695  | 0.00882  | 0.00528 |
| 9451  | 2019.60 | 124.1 | 3.51 | 0.63  | 0.0248 | 0.0002  | 28.48 | 1.191 | 4.952  | 2.4868 | -0.02152 | -0.00998 | -0.04878 | -0.00865 | -0.00401 | -0.01962 | 0.00681  | 0.00862  | 0.00478 |
| 9452  | 2020.03 | 124.1 | 3.51 | 0.63  | 0.0255 | 0.0024  | 28.61 | 1.191 | 5.076  | 2.4879 | -0.01751 | -0.01186 | -0.05032 | -0.00704 | -0.00477 | -0.02023 | 0.00843  | 0.00787  | 0.00417 |
| 9453  | 2020.46 | 123.6 | 3.51 | 0.63  | 0.0258 | -0.0011 | 28.74 | 1.191 | 5.201  | 2.4877 | -0.01705 | -0.01166 | -0.04918 | -0.00685 | -0.00469 | -0.01977 | 0.00861  | 0.00795  | 0.00462 |
| 9454  | 2019.89 | 123.8 | 3.51 | 0.63  | 0.0248 | 0.0020  | 28.86 | 1.191 | 5.332  | 2.4869 | -0.01532 | -0.01246 | -0.04774 | -0.00616 | -0.00501 | -0.01920 | 0.00930  | 0.00762  | 0.00520 |
| 9455  | 2020.18 | 123.8 | 3.51 | 0.63  | 0.0276 | -0.0002 | 28.98 | 1.191 | 5.454  | 2.4866 | -0.01542 | -0.01041 | -0.04572 | -0.00620 | -0.00419 | -0.01839 | 0.00926  | 0.00845  | 0.00600 |
| 9456  | 2019.74 | 123.9 | 3.51 | 0.63  | 0.0231 | 0.0039  | 29.11 | 1.191 | 5.579  | 2.4869 | -0.01757 | -0.00856 | -0.04599 | -0.00707 | -0.00344 | -0.01849 | 0.00840  | 0.00919  | 0.00590 |
| 9457  | 2020.32 | 124.0 | 3.51 | 0.64  | 0.0272 | 0.0015  | 29.23 | 1.191 | 5.695  | 2.4870 | -0.01515 | -0.00908 | -0.04452 | -0.00609 | -0.00365 | -0.01790 | 0.00937  | 0.00898  | 0.00649 |
| 9458  | 2019.89 | 124.1 | 3.51 | 0.63  | 0.0265 | -0.0008 | 29.36 | 1.191 | 5.828  | 2.4879 | -0.01719 | -0.01211 | -0.04634 | -0.00691 | -0.00487 | -0.01862 | 0.00855  | 0.00777  | 0.00577 |
| 9459  | 2019.60 | 124.1 | 3.51 | 0.63  | 0.0259 | 0.0035  | 29.48 | 1.191 | 5.955  | 2.4874 | -0.01663 | -0.00731 | -0.04688 | -0.00668 | -0.00294 | -0.01885 | 0.00878  | 0.00970  | 0.00555 |
| 9460  | 2020.32 | 124.2 | 3.51 | 0.63  | 0.0293 | -0.0002 | 29.61 | 1.191 | 6.073  | 2.4879 | -0.01442 | -0.00405 | -0.04701 | -0.00580 | -0.00163 | -0.01889 | 0.00967  | 0.01101  | 0.00550 |
| 9461  | 2020.18 | 124.3 | 3.51 | 0.63  | 0.0238 | 0.0070  | 29.73 | 1.191 | 6.200  | 2.4875 | -0.01445 | -0.00333 | -0.04791 | -0.00581 | -0.00134 | -0.01926 | 0.00966  | 0.01130  | 0.00513 |
| 9462  | 2020.18 | 124.3 | 3.51 | 0.63  | 0.0255 | 0.0042  | 29.86 | 1.191 | 6.329  | 2.4868 | -0.01096 | -0.00080 | -0.04767 | -0.00441 | -0.00032 | -0.01917 | 0.01106  | 0.01295  | 0.00522 |
| 9463  | 2020.03 | 124.1 | 3.51 | 0.63  | 0.0241 | 0.0007  | 29.99 | 1.191 | 6.462  | 2.4884 | -0.00985 | -0.00273 | -0.04726 | -0.00396 | -0.00110 | -0.01899 | 0.01151  | 0.01154  | 0.00540 |
| 9464  | 2020.03 | 124.0 | 3.51 | 0.63  | 0.0238 | 0.0024  | 30.11 | 1.191 | 6.582  | 2.4874 | -0.00859 | 0.00055  | -0.04277 | -0.00345 | 0.00022  | -0.01719 | 0.01201  | 0.01286  | 0.00720 |
| 9465  | 2020.03 | 124.0 | 3.51 | 0.63  | 0.0241 | 0.0007  | 30.23 | 1.191 | 6.707  | 2.4869 | -0.00462 | 0.00366  | -0.04026 | -0.00186 | 0.00147  | -0.01619 | 0.01361  | 0.01411  | 0.00820 |
| 9466  | 2020.18 | 124.0 | 3.51 | 0.64  | 0.0255 | 0.0033  | 30.36 | 1.191 | 6.823  | 2.4888 | -0.00631 | 0.00300  | -0.04109 | -0.00254 | 0.00120  | -0.01651 | 0.01293  | 0.01384  | 0.00788 |
| 9467  | 2020.03 | 124.0 | 3.51 | 0.63  | 0.0262 | 0.0000  | 30.48 | 1.191 | 6.952  | 2.4865 | -0.00353 | 0.00581  | -0.04014 | -0.00142 | 0.00234  | -0.01614 | 0.01404  | 0.01497  | 0.00825 |
| 9468  | 2020.03 | 124.0 | 3.51 | 0.62  | 0.0259 | -0.0039 | 30.68 | 1.191 | 7.150  | 2.4870 | -0.00176 | 0.00567  | -0.04106 | -0.00071 | 0.00228  | -0.01651 | 0.01476  | 0.01491  | 0.00788 |
| 9469  | 2019.60 | 124.0 | 3.51 | 0.63  | 0.0272 | -0.0023 | 30.74 | 1.191 | 7.203  | 2.4871 | -0.00079 | 0.00726  | -0.03959 | -0.00032 | 0.00292  | -0.01592 | 0.01515  | 0.01555  | 0.00848 |
| 9470  | 2019.89 | 124.1 | 3.51 | 0.63  | 0.0269 | -0.0052 | 30.86 | 1.191 | 7.329  | 2.4862 | 0.00039  | 0.00704  | -0.03933 | 0.00016  | 0.00283  | -0.01582 | 0.01562  | 0.01547  | 0.00858 |
| 9471  | 2020.03 | 124.2 | 3.51 | 0.63  | 0.0272 | 0.0024  | 30.99 | 1.191 | 7.456  | 2.4880 | 0.00055  | 0.00524  | -0.04147 | 0.00022  | 0.00211  | -0.01667 | 0.01569  | 0.01474  | 0.00773 |
| 9472  | 2019.89 | 124.1 | 3.51 | 0.64  | 0.0252 | -0.0034 | 31.11 | 1.191 | 7.570  | 2.4863 | 0.00113  | 0.00377  | -0.03873 | 0.00046  | 0.00151  | -0.01558 | 0.01592  | 0.01415  | 0.00882 |
| 9473  | 2019.89 | 124.1 | 3.51 | 0.64  | 0.0276 | -0.0039 | 31.23 | 1.192 | 7.692  | 2.4867 | 0.00332  | 0.00085  | -0.03684 | 0.00134  | 0.00034  | -0.01481 | 0.01680  | 0.01298  | 0.00958 |
| 9474  | 2020.61 | 124.0 | 3.51 | 0.63  | 0.0282 | 0.0002  | 31.36 | 1.191 | 7.828  | 2.4870 | 0.00191  | -0.00079 | -0.03544 | 0.00077  | -0.00032 | -0.01425 | 0.01623  | 0.01232  | 0.01014 |
| 9475  | 2020.03 | 124.0 | 3.51 | 0.63  | 0.0252 | 0.0013  | 31.49 | 1.191 | 7.956  | 2.4870 | -0.00239 | -0.00485 | -0.03435 | -0.00096 | -0.00195 | -0.01381 | 0.01451  | 0.01068  | 0.01058 |
| 9476  | 2020.03 | 123.8 | 3.51 | 0.64  | 0.0258 | -0.0002 | 31.61 | 1.192 | 8.070  | 2.4883 | -0.00703 | -0.00826 | -0.03315 | -0.00282 | -0.00332 | -0.01332 | 0.01264  | 0.00932  | 0.01107 |
| 9477  | 2020.18 | 124.0 | 3.51 | 0.63  | 0.0269 | 0.0003  | 31.74 | 1.191 | 8.206  | 2.4877 | -0.00822 | -0.00695 | -0.03079 | -0.00330 | -0.00279 | -0.01238 | 0.01216  | 0.00984  | 0.01201 |
| 9478  | 2020.03 | 123.9 | 3.51 | 0.63  | 0.0269 | 0.0013  | 31.86 | 1.191 | 8.326  | 2.4878 | -0.00999 | -0.00915 | -0.03135 | -0.00402 | -0.00368 | -0.01260 | 0.01145  | 0.00896  | 0.01179 |
| 9479  | 2020.03 | 123.7 | 3.51 | 0.63  | 0.0241 | 0.0044  | 31.99 | 1.191 | 8.453  | 2.4868 | -0.01352 | -0.01235 | -0.03063 | -0.00544 | -0.00497 | -0.01232 | 0.01003  | 0.00767  | 0.01207 |
| 9480  | 2020.03 | 123.8 | 3.51 | 0.63  | 0.0255 | 0.0033  | 32.11 | 1.191 | 8.579  | 2.4879 | -0.01571 | -0.01774 | -0.03120 | -0.00631 | -0.00713 | -0.01254 | 0.00915  | 0.00550  | 0.01185 |
| 9481  | 2019.60 | 123.7 | 3.51 | 0.63  | 0.0255 | 0.0043  | 32.23 | 1.191 | 8.705  | 2.4872 | -0.01666 | -0.02251 | -0.03084 | -0.00670 | -0.00905 | -0.01240 | 0.00877  | 0.00358  | 0.01200 |
| 9482  | 2020.18 | 123.6 | 3.51 | 0.63  | 0.0265 | 0.0030  | 32.36 | 1.191 | 8.833  | 2.4874 | -0.01959 | -0.02625 | -0.03024 | -0.00788 | -0.01055 | -0.01216 | 0.00759  | 0.00208  | 0.01223 |
| 9483  | 2020.18 | 124.0 | 3.51 | 0.64  | 0.0272 | -0.0004 | 32.49 | 1.192 | 8.943  | 2.4869 | -0.02453 | -0.03239 | -0.02772 | -0.00986 | -0.01302 | -0.01115 | 0.00560  | -0.00309 | 0.01325 |
| 9484  | 2020.03 | 123.9 | 3.51 | 0.63  | 0.0221 | 0.0033  | 32.61 | 1.191 | 9.084  | 2.4874 | -0.03462 | -0.04298 | -0.02928 | -0.01392 | -0.01728 | -0.01177 | 0.00155  | -0.00465 | 0.01262 |
| 9485  | 2020.03 | 123.8 | 3.51 | 0.64  | 0.0245 | 0.0018  | 32.74 | 1.191 | 9.196  | 2.4865 | -0.03677 | -0.04653 | -0.02729 | -0.01479 | -0.01871 | -0.01098 | 0.00068  | -0.00608 | 0.01342 |
| 9486  | 2019.46 | 123.9 | 3.51 | 0.63  | 0.0259 | 0.0026  | 32.86 | 1.191 | 9.324  | 2.4858 | -0.03901 | -0.05058 | -0.02862 | -0.01569 | -0.02035 | -0.01151 | -0.00023 | -0.00771 | 0.01288 |
| 9487  | 2020.03 | 123.8 | 3.51 | 0.64  | 0.0272 | -0.0041 | 32.99 | 1.192 | 9.446  | 2.4895 | -0.05057 | -0.06072 | -0.03480 | -0.02031 | -0.02439 | -0.01398 | -0.00485 | -0.01176 | 0.01042 |
| 9488  | 2019.89 | 123.8 | 3.51 | 0.63  | 0.0241 | 0.0026  | 33.11 | 1.191 | 9.578  | 2.4870 | -0.05314 |          |          |          |          |          |          |          |         |

Table A13. Concluded.

Run = 143

M = 1.80

xsppos = 42.346

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc   | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|---------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 9508  | 2020.03 | 123.8 | 3.51 | 0.64  | 0.0241 | 0.0016  | 35.61 | 1.191 | 12.074 | 2.4871 | -0.04948 | -0.04074 | -0.08953 | -0.01989 | -0.01638 | -0.03600 | -0.00443 | -0.00375 | -0.01161 |
| 9509  | 2020.32 | 123.9 | 3.51 | 0.63  | 0.0245 | 0.0000  | 35.73 | 1.191 | 12.200 | 2.4876 | -0.04806 | -0.03990 | -0.08722 | -0.01932 | -0.01604 | -0.03506 | -0.00386 | -0.00340 | -0.01067 |
| 9510  | 2019.74 | 124.0 | 3.51 | 0.64  | 0.0248 | -0.0017 | 35.86 | 1.191 | 12.321 | 2.4870 | -0.04393 | -0.03582 | -0.08517 | -0.01766 | -0.01440 | -0.03425 | -0.00220 | -0.00177 | -0.00985 |
| 9511  | 2020.03 | 124.1 | 3.51 | 0.63  | 0.0258 | 0.0016  | 35.98 | 1.191 | 12.451 | 2.4864 | -0.04301 | -0.03404 | -0.08224 | -0.01730 | -0.01369 | -0.03308 | -0.00183 | -0.00105 | -0.00868 |
| 9512  | 2019.89 | 124.0 | 3.51 | 0.62  | 0.0245 | 0.0018  | 36.11 | 1.191 | 12.585 | 2.4864 | -0.04160 | -0.03206 | -0.08102 | -0.01673 | -0.01290 | -0.03258 | -0.00126 | -0.00026 | -0.00819 |
| 9513  | 2019.46 | 124.0 | 3.51 | 0.63  | 0.0231 | 0.0011  | 36.23 | 1.191 | 12.707 | 2.4872 | -0.04413 | -0.03369 | -0.07989 | -0.01774 | -0.01354 | -0.03212 | -0.00228 | -0.00091 | -0.00773 |
| 9514  | 2020.32 | 123.9 | 3.51 | 0.63  | 0.0234 | 0.0059  | 36.36 | 1.191 | 12.833 | 2.4864 | -0.04173 | -0.03195 | -0.07276 | -0.01678 | -0.01285 | -0.02926 | -0.00132 | -0.00021 | -0.00487 |
| 9515  | 2020.46 | 124.1 | 3.51 | 0.62  | 0.0231 | 0.0048  | 36.48 | 1.191 | 12.961 | 2.4870 | -0.04104 | -0.03362 | -0.07109 | -0.01650 | -0.01352 | -0.02859 | -0.00104 | -0.00088 | -0.00419 |
| 9516  | 2019.89 | 124.0 | 3.51 | 0.64  | 0.0245 | 0.0028  | 36.61 | 1.192 | 13.068 | 2.4872 | -0.04109 | -0.03457 | -0.06697 | -0.01652 | -0.01390 | -0.02693 | -0.00105 | -0.00126 | -0.00253 |
| 9517  | 2019.74 | 124.1 | 3.51 | 0.64  | 0.0241 | 0.0054  | 36.73 | 1.191 | 13.198 | 2.4864 | -0.03919 | -0.03533 | -0.06547 | -0.01576 | -0.01421 | -0.02633 | -0.00030 | -0.00158 | -0.00194 |
| 9518  | 2020.03 | 123.9 | 3.51 | 0.63  | 0.0217 | 0.0050  | 36.86 | 1.191 | 13.329 | 2.4864 | -0.03817 | -0.03517 | -0.06507 | -0.01535 | -0.01415 | -0.02617 | 0.00012  | -0.00151 | -0.00178 |
| 9519  | 2019.60 | 124.1 | 3.51 | 0.63  | 0.0221 | 0.0052  | 36.98 | 1.191 | 13.453 | 2.4882 | -0.04148 | -0.03964 | -0.06825 | -0.01667 | -0.01593 | -0.02743 | -0.00121 | -0.00330 | -0.00303 |
| 9520  | 2020.03 | 123.9 | 3.51 | 0.64  | 0.0245 | 0.0065  | 37.11 | 1.192 | 13.571 | 2.4871 | -0.04126 | -0.03974 | -0.06726 | -0.01659 | -0.01598 | -0.02704 | -0.00112 | -0.00334 | -0.00265 |
| 9521  | 2019.89 | 124.0 | 3.51 | 0.63  | 0.0241 | 0.0035  | 37.24 | 1.191 | 13.712 | 2.4858 | -0.03954 | -0.03895 | -0.06606 | -0.01591 | -0.01567 | -0.02657 | -0.00044 | -0.00304 | -0.00218 |
| 9522  | 2019.89 | 123.9 | 3.51 | 0.63  | 0.0221 | 0.0061  | 37.36 | 1.191 | 13.836 | 2.4858 | -0.04266 | -0.03887 | -0.06626 | -0.01716 | -0.01564 | -0.02666 | -0.00170 | -0.00300 | -0.00226 |
| 9523  | 2020.32 | 123.9 | 3.51 | 0.63  | 0.0217 | 0.0068  | 37.49 | 1.191 | 13.956 | 2.4871 | -0.04519 | -0.03728 | -0.06728 | -0.01817 | -0.01499 | -0.02705 | -0.00271 | -0.00236 | -0.00266 |
| 9524  | 2020.18 | 123.8 | 3.51 | 0.62  | 0.0221 | 0.0033  | 37.61 | 1.191 | 14.091 | 2.4883 | -0.04735 | -0.03656 | -0.06860 | -0.01903 | -0.01469 | -0.02757 | -0.00356 | -0.00206 | -0.00318 |
| 9525  | 2020.32 | 124.1 | 3.51 | 0.62  | 0.0241 | 0.0063  | 37.74 | 1.191 | 14.212 | 2.4870 | -0.04578 | -0.03155 | -0.06738 | -0.01841 | -0.01269 | -0.02709 | -0.00294 | -0.00005 | -0.00270 |
| 9526  | 2020.18 | 124.2 | 3.51 | 0.62  | 0.0248 | 0.0029  | 37.86 | 1.191 | 14.341 | 2.4876 | -0.04468 | -0.03167 | -0.06812 | -0.01796 | -0.01273 | -0.02738 | -0.00250 | -0.00010 | -0.00299 |
| 9527  | 2019.89 | 123.7 | 3.51 | 0.62  | 0.0238 | 0.0042  | 37.99 | 1.191 | 14.462 | 2.4871 | -0.04085 | -0.03199 | -0.06831 | -0.01643 | -0.01286 | -0.02747 | -0.00096 | -0.00023 | -0.00307 |
| 9528  | 2019.46 | 123.8 | 3.51 | 0.63  | 0.0224 | 0.0109  | 38.11 | 1.191 | 14.586 | 2.4864 | -0.03774 | -0.03414 | -0.06740 | -0.01518 | -0.01373 | -0.02711 | 0.00029  | -0.00110 | -0.00271 |
| 9529  | 2020.03 | 123.8 | 3.51 | 0.64  | 0.0238 | 0.0089  | 38.24 | 1.191 | 14.698 | 2.4876 | -0.03738 | -0.03703 | -0.06869 | -0.01503 | -0.01489 | -0.02761 | 0.00044  | -0.00225 | -0.00322 |
| 9530  | 2019.89 | 123.7 | 3.51 | 0.64  | 0.0245 | 0.0065  | 38.36 | 1.191 | 14.821 | 2.4868 | -0.03755 | -0.03962 | -0.06806 | -0.01510 | -0.01593 | -0.02737 | 0.00036  | -0.00330 | -0.00298 |
| 9531  | 2020.03 | 123.9 | 3.51 | 0.64  | 0.0231 | 0.0057  | 38.49 | 1.191 | 14.950 | 2.4879 | -0.04196 | -0.04046 | -0.06973 | -0.01686 | -0.01626 | -0.02803 | -0.00140 | -0.00363 | -0.00363 |
| 9532  | 2020.32 | 123.9 | 3.51 | 0.64  | 0.0238 | 0.0061  | 38.61 | 1.192 | 15.068 | 2.4862 | -0.04252 | -0.03550 | -0.06743 | -0.01710 | -0.01428 | -0.02712 | -0.00164 | -0.00164 | -0.00273 |
| 9533  | 2020.32 | 123.7 | 3.51 | 0.63  | 0.0255 | 0.0052  | 38.74 | 1.191 | 15.201 | 2.4873 | -0.04597 | -0.03297 | -0.06993 | -0.01848 | -0.01326 | -0.02812 | -0.00302 | -0.00062 | -0.00372 |
| 9534  | 2020.03 | 124.0 | 3.51 | 0.63  | 0.0252 | 0.0078  | 38.86 | 1.191 | 15.328 | 2.4864 | -0.04691 | -0.02765 | -0.07176 | -0.01887 | -0.01112 | -0.02886 | -0.00340 | 0.00151  | -0.00447 |
| 9535  | 2019.60 | 123.9 | 3.51 | 0.63  | 0.0238 | 0.0080  | 38.99 | 1.191 | 15.452 | 2.4863 | -0.04290 | -0.02731 | -0.07233 | -0.01726 | -0.01099 | -0.02909 | -0.00179 | 0.00165  | -0.00470 |
| 9536  | 2020.03 | 124.0 | 3.51 | 0.62  | 0.0234 | 0.0050  | 39.11 | 1.191 | 15.589 | 2.4864 | -0.03636 | -0.02595 | -0.07196 | -0.01462 | -0.01043 | -0.02894 | 0.00084  | 0.00220  | -0.00455 |
| 9537  | 2019.89 | 124.1 | 3.51 | 0.63  | 0.0258 | 0.0063  | 39.23 | 1.191 | 15.706 | 2.4872 | -0.03693 | -0.02687 | -0.07229 | -0.01485 | -0.01080 | -0.02907 | 0.00062  | 0.00183  | -0.00467 |
| 9538  | 2019.89 | 124.1 | 3.51 | 0.63  | 0.0224 | 0.0100  | 39.36 | 1.191 | 15.832 | 2.4865 | -0.03316 | -0.02690 | -0.06858 | -0.01333 | -0.01082 | -0.02758 | 0.00213  | 0.00182  | -0.00319 |
| 9539  | 2020.18 | 123.8 | 3.51 | 0.64  | 0.0214 | 0.0113  | 39.48 | 1.191 | 15.952 | 2.4877 | -0.03471 | -0.02801 | -0.06468 | -0.01395 | -0.01126 | -0.02600 | 0.00151  | 0.00138  | -0.00160 |
| 9540  | 2019.60 | 124.1 | 3.51 | 0.62  | 0.0235 | 0.0041  | 39.61 | 1.191 | 16.089 | 2.4872 | -0.03382 | -0.02946 | -0.06221 | -0.01360 | -0.01184 | -0.02501 | 0.00187  | 0.00079  | -0.00062 |
| 9541  | 2019.89 | 124.0 | 3.51 | 0.63  | 0.0238 | 0.0080  | 39.73 | 1.191 | 16.209 | 2.4873 | -0.03501 | -0.02903 | -0.06150 | -0.01408 | -0.01167 | -0.02472 | 0.00139  | 0.00096  | -0.00033 |
| 9542  | 2019.89 | 123.9 | 3.51 | 0.63  | 0.0241 | 0.0072  | 39.86 | 1.191 | 16.330 | 2.4868 | -0.03433 | -0.02876 | -0.06067 | -0.01381 | -0.01157 | -0.02440 | 0.00166  | 0.00107  | -0.00001 |
| 9543  | 2020.03 | 124.2 | 3.51 | 0.64  | 0.0255 | 0.0061  | 39.99 | 1.191 | 16.449 | 2.4893 | -0.03636 | -0.03155 | -0.06693 | -0.01461 | -0.01267 | -0.02689 | 0.00086  | -0.00004 | -0.00250 |
| 9544  | 2020.03 | 124.1 | 3.51 | 0.63  | 0.0234 | 0.0087  | 40.11 | 1.191 | 16.580 | 2.4883 | -0.03686 | -0.03128 | -0.07001 | -0.01481 | -0.01257 | -0.02814 | 0.00065  | 0.00006  | -0.00374 |
| 9545  | 2019.74 | 124.1 | 3.51 | 0.63  | 0.0234 | 0.0078  | 40.24 | 1.191 | 16.706 | 2.4881 | -0.03697 | -0.03192 | -0.07318 | -0.01486 | -0.01283 | -0.02941 | 0.00061  | -0.00019 | -0.00502 |
| 9546  | 2019.60 | 124.2 | 3.51 | 0.64  | 0.0231 | 0.0067  | 40.36 | 1.192 | 16.817 | 2.4873 | -0.03686 | -0.03066 | -0.07205 | -0.01482 | -0.01233 | -0.02897 | 0.00065  | 0.00031  | -0.00458 |
| 9547  | 2019.74 | 124.2 | 3.51 | 0.63  | 0.0221 | 0.0042  | 40.48 | 1.191 | 16.953 | 2.4864 | -0.03556 | -0.03030 | -0.07026 | -0.01430 | -0.01219 | -0.02826 | 0.00116  | 0.00045  | -0.00387 |
| 9548  | 2019.89 | 124.2 | 3.51 | 0.64  | 0.0214 | 0.0085  | 40.61 | 1.191 | 17.079 | 2.4876 | -0.03821 | -0.03158 | -0.06509 | -0.01536 | -0.01269 | -0.02617 | 0.00011  | -0.00006 | -0.00177 |
| 9549  | 2019.74 | 124.3 | 3.51 | 0.64  | 0.0224 | 0.0063  | 40.73 | 1.191 | 17.198 | 2.4863 | -0.03612 | -0.02992 | -0.05908 | -0.01453 | -0.01203 | -0.02376 | 0.00094  | 0.00060  | 0.00063  |
| 9550  | 2020.61 | 124.1 | 3.51 | 0.64  | 0.0224 | 0.0053  | 40.86 | 1.191 | 17.324 | 2.4877 | -0.03764 | -0.03061 | -0.05803 | -0.01513 | -0.01230 | -0.02333 | 0.00033  | 0.00033  | 0.00107  |
| 9551  | 2020.03 | 124.1 | 3.51 | 0.64  | 0.0234 | 0.0059  | 40.99 | 1.191 | 17.451 | 2.4893 | -0.03930 | -0.03236 | -0.05940 | -0.01579 | -0.01300 | -0.02386 | -0.00032 | -0.00037 | 0.00053  |
| 9552  | 2019.89 | 124.1 | 3.51 | 0.63  | 0.0214 | 0.0048  | 41.11 | 1.191 | 17.582 | 2.4870 | -0.03631 | -0.02987 | -0.05811 | -0.01460 | -0.01201 | -0.02337 | 0.00086  | 0.00062  | 0.00103  |
| 9553  | 2020.18 | 124.0 | 3.51 | 0.63  | 0.0221 | -0.0004 | 41.23 | 1.191 | 17.705 | 2.4859 | -0.03495 | -0.02874 | -0.05719 | -0.01406 | -0.01156 | -0.02301 | 0.00141  | 0.00107  | 0.00139  |
| 9554  | 2020.03 | 123.9 | 3.51 | 0.63  | 0.0238 | 0.0005  | 41.36 | 1.191 | 17.831 | 2.4881 | -0.03867 | -0.03166 | -0.06044 | -0.01554 | -0.01272 | -0.02429 | -0.00008 | -0.00009 | 0.00010  |
| 9555  | 2019.89 | 123.9 | 3.51 | 0.64  | 0.0228 | 0.0065  | 41.49 | 1.191 | 17.952 | 2.4877 | -0.03670 | -0.03108 | -0.05968 | -0.01475 | -0.01249 | -0.02399 | 0.00071  | 0.00014  | 0.00040  |
| 9556  | 2020.18 | 123.8 | 3.51 | 0.63  | 0.0224 | 0.0026  | 41.61 | 1.191 | 18.086 | 2.4866 | -0.03443 | -0.02934 | -0.05900 | -0.01385 | -0.01180 | -0.02373 | 0.00162  | 0.00084  | 0.00067  |
| 9557  | 2020.03 | 123.9 | 3.51 | 0.63  | 0.0234 | 0.0022  | 41.74 | 1.191 | 18.208 | 2.4864 | -0.03513 | -0.02870 | -0.05974 | -0.01413 | -0.01154 | -0.02403 | 0.00134  | 0.00109  | 0.00037  |
| 9558  | 2020.03 | 123.8 | 3.51 | 0.62  | 0.0214 | 0.0085  | 41.86 | 1.190 | 18.344 | 2.4876 | -0.03637 | -0.03001 | -0.06107 | -0.01462 | -0.01207 | -0.02455 | 0.00084  | 0.00057  | -0.00015 |
| 9559  | 2019.89 | 123.9 | 3.51 | 0.63  | 0.0214 | 0.0076  | 41.99 | 1.191 | 18.457 | 2.4874 | -0.03568 | -0.02989 | -0.06163 | -0.01434 | -0.01202 | -0.02478 | 0.00112  | 0.00062  | -0.00039 |
| 9560  | 2020.03 | 123.8 | 3.51 | 0.64  | 0.0200 | 0.0096  | 42.11 | 1.191 | 18.580 | 2.4867 | -0.03547 | -0.02879 | -0.06159 | -0.01426 | -0.01158 | -0.02477 | 0.00120  | 0.00106  | -0.00038 |
| 9561  | 2019.60 | 123.9 | 3.51 | 0.64  | 0.0255 | 0.0052  |       |       |        |        |          |          |          |          |          |          |          |          |          |

Table A14. Run 144.

Run = 144

M = 1.80

xsppos = 42.347

| point | p0      | t0    | rnft | alpha | cnmrc   | cmmrc  | x     | h/L   | xhbeta | pref   | dp01       | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|---------|--------|-------|-------|--------|--------|------------|----------|----------|----------|----------|----------|----------|----------|----------|
| 9563  | 2020.18 | 123.9 | 3.51 | -0.25 | -0.0146 | 0.0315 | 17.49 | 1.180 | -5.816 | 2.4878 | -0.03881   | -0.03217 | -0.06195 | -0.01560 | -0.01293 | -0.02490 | -0.00019 | -0.00048 | -0.00044 |
| 9564  | 2020.03 | 123.9 | 3.51 | -0.26 | -0.0163 | 0.0315 | 17.61 | 1.179 | -5.680 | 2.4870 | -0.03912   | -0.03055 | -0.06156 | -0.01573 | -0.01228 | -0.02475 | -0.00032 | 0.00017  | -0.00030 |
| 9565  | 2019.74 | 123.9 | 3.51 | -0.25 | -0.0170 | 0.0321 | 17.74 | 1.179 | -5.557 | 2.4867 | -0.03902   | -0.03159 | -0.06096 | -0.01569 | -0.01270 | -0.02452 | -0.00028 | -0.00025 | -0.00006 |
| 9566  | 2019.89 | 123.9 | 3.51 | -0.24 | -0.0149 | 0.0267 | 17.86 | 1.180 | -5.448 | 2.4856 | -0.03776   | -0.03042 | -0.06014 | -0.01519 | -0.01224 | -0.02420 | 0.00022  | 0.00022  | 0.00026  |
| 9567  | 2019.60 | 123.7 | 3.51 | -0.25 | -0.0163 | 0.0287 | 17.99 | 1.179 | -5.312 | 2.4857 | -0.03687   | -0.03012 | -0.05946 | -0.01483 | -0.01212 | -0.02392 | 0.00058  | 0.00034  | 0.00054  |
| 9568  | 2020.32 | 123.5 | 3.51 | -0.25 | -0.0160 | 0.0298 | 18.11 | 1.179 | -5.185 | 2.4870 | -0.03921   | -0.03060 | -0.06031 | -0.01577 | -0.01230 | -0.02425 | -0.00036 | 0.00015  | 0.00021  |
| 9569  | 2020.18 | 123.9 | 3.51 | -0.24 | -0.0153 | 0.0302 | 18.24 | 1.180 | -5.068 | 2.4876 | -0.03865   | -0.03244 | -0.06120 | -0.01554 | -0.01304 | -0.02460 | -0.00013 | -0.00059 | -0.00015 |
| 9570  | 2020.03 | 124.1 | 3.51 | -0.24 | -0.0149 | 0.0304 | 18.36 | 1.180 | -4.949 | 2.4870 | -0.03922   | -0.03143 | -0.06086 | -0.01577 | -0.01264 | -0.02447 | -0.00036 | -0.00018 | -0.00002 |
| 9571  | 2020.03 | 124.1 | 3.51 | -0.26 | -0.0180 | 0.0361 | 18.48 | 1.179 | -4.805 | 2.4854 | -0.03636   | -0.02856 | -0.05906 | -0.01463 | -0.01149 | -0.02376 | 0.00078  | 0.00096  | 0.00069  |
| 9572  | 2020.18 | 123.8 | 3.51 | -0.25 | -0.0156 | 0.0356 | 18.61 | 1.179 | -4.686 | 2.4866 | -0.03688   | -0.03047 | -0.06042 | -0.01483 | -0.01225 | -0.02430 | 0.00058  | 0.00020  | 0.00016  |
| 9573  | 2019.89 | 123.9 | 3.51 | -0.25 | -0.0177 | 0.0354 | 18.74 | 1.179 | -4.562 | 2.4860 | -0.03743   | -0.02981 | -0.05990 | -0.01506 | -0.01199 | -0.02410 | 0.00035  | 0.00046  | 0.00036  |
| 9574  | 2019.89 | 123.8 | 3.51 | -0.25 | -0.0160 | 0.0298 | 18.86 | 1.179 | -4.437 | 2.4863 | -0.03825   | -0.03020 | -0.05988 | -0.01538 | -0.01215 | -0.02408 | 0.00003  | 0.00031  | 0.00037  |
| 9575  | 2019.74 | 123.8 | 3.51 | -0.25 | -0.0163 | 0.0315 | 18.99 | 1.179 | -4.310 | 2.4864 | -0.03863   | -0.03072 | -0.06075 | -0.01530 | -0.01235 | -0.02443 | 0.00011  | 0.00010  | 0.00002  |
| 9576  | 2019.74 | 123.9 | 3.51 | -0.27 | -0.0187 | 0.0320 | 19.11 | 1.178 | -4.169 | 2.4866 | -0.03800   | -0.03111 | -0.06018 | -0.01528 | -0.01251 | -0.02420 | 0.00013  | -0.00006 | 0.00026  |
| 9577  | 2019.60 | 124.0 | 3.51 | -0.24 | -0.0139 | 0.0328 | 19.24 | 1.180 | -4.071 | 2.4858 | -0.03681   | -0.02985 | -0.05953 | -0.01481 | -0.01201 | -0.02395 | 0.00060  | 0.00045  | 0.00051  |
| 9578  | 2020.46 | 124.0 | 3.51 | -0.25 | -0.0163 | 0.0343 | 19.36 | 1.179 | -3.936 | 2.4876 | -0.03801   | -0.03106 | -0.06158 | -0.01528 | -0.01249 | -0.02476 | 0.00013  | -0.00003 | -0.00030 |
| 9579  | 2020.03 | 124.0 | 3.51 | -0.24 | -0.0143 | 0.0308 | 19.49 | 1.180 | -3.821 | 2.4861 | -0.03603   | -0.03077 | -0.05985 | -0.01449 | -0.01238 | -0.02408 | 0.00092  | 0.00008  | 0.00038  |
| 9580  | 2020.03 | 124.1 | 3.51 | -0.25 | -0.0160 | 0.0326 | 19.61 | 1.179 | -3.690 | 2.4874 | -0.03803   | -0.03209 | -0.06087 | -0.01529 | -0.01290 | -0.02447 | 0.00012  | -0.00045 | -0.00001 |
| 9581  | 2019.89 | 124.1 | 3.51 | -0.24 | -0.0142 | 0.0280 | 19.74 | 1.180 | -3.574 | 2.4872 | -0.03756   | -0.03027 | -0.06120 | -0.01510 | -0.01326 | -0.02461 | 0.00031  | -0.00080 | -0.00015 |
| 9582  | 2020.32 | 124.0 | 3.51 | -0.25 | -0.0156 | 0.0328 | 19.86 | 1.179 | -3.440 | 2.4873 | -0.03804   | -0.03047 | -0.06149 | -0.01529 | -0.01225 | -0.02472 | 0.00012  | 0.00020  | -0.00026 |
| 9583  | 2020.32 | 124.1 | 3.51 | -0.25 | -0.0160 | 0.0345 | 19.99 | 1.179 | -3.312 | 2.4870 | -0.03711   | -0.03146 | -0.06102 | -0.01492 | -0.01265 | -0.02453 | 0.00049  | -0.00020 | -0.00008 |
| 9584  | 2020.32 | 124.1 | 3.51 | -0.25 | -0.0156 | 0.0309 | 20.11 | 1.179 | -3.188 | 2.4874 | -0.03867   | -0.03033 | -0.06119 | -0.01555 | -0.01219 | -0.02460 | -0.00014 | 0.00026  | -0.00004 |
| 9585  | 2020.03 | 123.7 | 3.51 | -0.26 | -0.0184 | 0.0332 | 20.24 | 1.179 | -3.047 | 2.4876 | -0.03948   | -0.03001 | -0.06106 | -0.01587 | -0.01206 | -0.02455 | -0.00046 | 0.00039  | -0.00009 |
| 9586  | 2020.18 | 123.7 | 3.51 | -0.25 | -0.0153 | 0.0302 | 20.36 | 1.179 | -2.933 | 2.4875 | -0.03864   | -0.02835 | -0.06108 | -0.01553 | -0.01140 | -0.02456 | -0.00012 | 0.00106  | -0.00010 |
| 9587  | 2020.18 | 123.9 | 3.51 | -0.25 | -0.0177 | 0.0317 | 20.49 | 1.179 | -2.804 | 2.4874 | -0.03750   | -0.02611 | -0.06142 | -0.01508 | -0.01050 | -0.02469 | 0.00033  | 0.00196  | -0.00024 |
| 9588  | 2020.03 | 123.8 | 3.51 | -0.26 | -0.0163 | 0.0306 | 20.61 | 1.179 | -2.682 | 2.4874 | -0.03674   | -0.02840 | -0.06138 | -0.01477 | -0.01142 | -0.02468 | 0.00064  | 0.00104  | -0.00022 |
| 9589  | 2019.74 | 123.8 | 3.51 | -0.26 | -0.0180 | 0.0352 | 20.74 | 1.179 | -2.553 | 2.4863 | -0.03530   | -0.02983 | -0.06036 | -0.01420 | -0.01200 | -0.02428 | 0.00121  | 0.00046  | 0.00018  |
| 9590  | 2020.03 | 124.0 | 3.51 | -0.26 | -0.0177 | 0.0354 | 20.86 | 1.179 | -2.428 | 2.4869 | -0.03273   | -0.03228 | -0.06126 | -0.01316 | -0.01298 | -0.02463 | 0.00225  | -0.00053 | -0.00018 |
| 9591  | 2019.89 | 124.0 | 3.51 | -0.26 | -0.0177 | 0.0354 | 20.99 | 1.179 | -2.300 | 2.4874 | -0.03554   | -0.03301 | -0.06105 | -0.01429 | -0.01327 | -0.02454 | 0.00112  | -0.00081 | -0.00009 |
| 9592  | 2019.89 | 124.0 | 3.51 | -0.25 | -0.0184 | 0.0359 | 21.11 | 1.179 | -2.180 | 2.4864 | -0.03747   | -0.03022 | -0.06004 | -0.01507 | -0.01215 | -0.02415 | 0.00034  | 0.00030  | 0.00031  |
| 9593  | 2020.18 | 124.1 | 3.51 | -0.24 | -0.0156 | 0.0356 | 21.24 | 1.180 | -2.069 | 2.4863 | -0.03888   | -0.02766 | -0.06043 | -0.01564 | -0.01112 | -0.02431 | -0.00023 | 0.00133  | 0.00015  |
| 9594  | 2019.74 | 123.9 | 3.51 | -0.25 | -0.0177 | 0.0345 | 21.36 | 1.179 | -1.940 | 2.4884 | -0.03994   | -0.02675 | -0.06314 | -0.01605 | -0.01075 | -0.02538 | -0.00064 | 0.00170  | -0.00092 |
| 9595  | 2020.03 | 123.7 | 3.51 | -0.26 | -0.0177 | 0.0372 | 21.49 | 1.179 | -1.801 | 2.4874 | -0.03821   | -0.02250 | -0.06070 | -0.01536 | -0.00905 | -0.02440 | 0.00005  | 0.00341  | 0.00006  |
| 9596  | 2019.31 | 123.7 | 3.51 | -0.25 | -0.0177 | 0.0382 | 21.61 | 1.179 | -1.683 | 2.4859 | -0.03588   | -0.02113 | -0.06010 | -0.01443 | -0.00850 | -0.02418 | 0.00098  | 0.00395  | 0.00028  |
| 9597  | 2019.89 | 123.8 | 3.51 | -0.24 | -0.0160 | 0.0335 | 21.74 | 1.180 | -1.568 | 2.4866 | -0.03067   | -0.02368 | -0.06094 | -0.01233 | -0.00952 | -0.02451 | 0.00308  | 0.00293  | -0.00005 |
| 9598  | 2020.18 | 123.9 | 3.51 | -0.25 | -0.0180 | 0.0389 | 21.86 | 1.179 | -1.433 | 2.4870 | -0.02934   | -0.02741 | -0.06107 | -0.01180 | -0.01102 | -0.02456 | 0.00361  | 0.00143  | -0.00010 |
| 9599  | 2019.60 | 123.8 | 3.51 | -0.26 | -0.0184 | 0.0360 | 21.99 | 1.179 | -1.299 | 2.4864 | -0.02960   | -0.03059 | -0.06135 | -0.01190 | -0.01230 | -0.02467 | 0.00351  | 0.00015  | -0.00022 |
| 9600  | 2019.89 | 123.9 | 3.51 | -0.26 | -0.0197 | 0.0371 | 22.11 | 1.179 | -1.174 | 2.4869 | -0.03181   | -0.03275 | -0.05946 | -0.01279 | -0.01317 | -0.02391 | 0.00262  | -0.00072 | 0.00055  |
| 9601  | 2019.89 | 124.1 | 3.51 | -0.24 | -0.0167 | 0.0332 | 22.24 | 1.180 | -1.069 | 2.4863 | -0.03360   | -0.03355 | -0.05788 | -0.01351 | -0.01349 | -0.02328 | 0.00190  | -0.00104 | 0.00118  |
| 9602  | 2019.89 | 124.0 | 3.51 | -0.24 | -0.0173 | 0.0319 | 22.36 | 1.179 | -0.939 | 2.4859 | -0.03681   | -0.02820 | -0.05521 | -0.01481 | -0.01134 | -0.02221 | 0.00060  | 0.00111  | 0.00225  |
| 9603  | 2020.32 | 123.9 | 3.51 | -0.25 | -0.0177 | 0.0335 | 22.49 | 1.179 | -0.811 | 2.4874 | -0.04041   | -0.02569 | -0.05742 | -0.01625 | -0.01033 | -0.02308 | -0.00084 | 0.00213  | 0.00137  |
| 9604  | 2019.60 | 124.0 | 3.51 | -0.26 | -0.0177 | 0.0335 | 22.61 | 1.179 | -0.680 | 2.4872 | -0.04119   | -0.02311 | -0.06010 | -0.01656 | -0.00929 | -0.02416 | -0.00115 | 0.00316  | 0.00029  |
| 9605  | 2019.89 | 124.1 | 3.51 | -0.26 | -0.0173 | 0.0309 | 22.74 | 1.179 | -0.550 | 2.4868 | -0.03760   | -0.01884 | -0.06159 | -0.01512 | -0.00758 | -0.02476 | 0.00029  | 0.00488  | -0.00031 |
| 9606  | 2020.18 | 124.0 | 3.51 | -0.25 | -0.0184 | 0.0332 | 22.86 | 1.179 | -0.432 | 2.4874 | -0.03293   | -0.01891 | -0.06275 | -0.01324 | -0.00760 | -0.02523 | 0.00217  | 0.00485  | -0.00077 |
| 9607  | 2020.32 | 123.9 | 3.51 | -0.25 | -0.0170 | 0.0311 | 22.99 | 1.179 | -0.312 | 2.4880 | -0.02836   | -0.02412 | -0.06271 | -0.01140 | -0.00969 | -0.02520 | 0.00401  | 0.00276  | -0.00075 |
| 9608  | 2020.03 | 124.0 | 3.51 | -0.25 | -0.0156 | 0.0328 | 23.11 | 1.179 | -0.186 | 2.4870 | -0.02381   | -0.02611 | -0.06159 | -0.00957 | -0.01050 | -0.02477 | 0.00584  | 0.00195  | -0.00031 |
| 9609  | 2020.03 | 123.7 | 3.51 | -0.24 | -0.0167 | 0.0341 | 23.24 | 1.180 | -0.068 | 2.4876 | -0.02712   | -0.03107 | -0.05893 | -0.01090 | -0.01249 | -0.02369 | 0.00451  | -0.00003 | 0.00077  |
| 9610  | 2019.89 | 123.5 | 3.51 | -0.25 | -0.0177 | 0.0326 | 23.36 | 1.179 | 0.063  | 2.4864 | -0.03158   | -0.03153 | -0.05412 | -0.01270 | -0.01268 | -0.02177 | 0.00271  | -0.00023 | 0.00269  |
| 9611  | 2020.03 | 123.5 | 3.51 | -0.25 | -0.0170 | 0.0311 | 23.49 | 1.179 | 0.189  | 2.4871 | -0.03426   | -0.03084 | -0.05313 | -0.01377 | -0.01240 | -0.02136 | 0.00164  | 0.00006  | 0.00310  |
| 9612  | 2019.89 | 123.8 | 3.51 | -0.25 | -0.0187 | 0.0320 | 23.61 | 1.179 | 0.316  | 2.4867 | -0.03807   | -0.02538 | -0.05325 | -0.01531 | -0.01021 | -0.02142 | 0.00010  | 0.00225  | 0.00304  |
| 9613  | 2019.89 | 124.1 | 3.51 | -0.25 | -0.0167 | 0.0332 | 23.74 | 1.179 | 0.436  | 2.4878 | -0.04018   | -0.02244 | -0.05615 | -0.01615 | -0.00902 | -0.02257 | -0.00074 | 0.00343  | 0.00189  |
| 9614  | 2019.74 | 123.9 | 3.51 | -0.24 | -0.0163 | 0.0343 | 23.86 | 1.180 | 0.552  | 2.4875 | -0.03866   | -0.01735 | -0.05990 | -0.01554 | -0.00697 | -0.02408 | -0.00013 | 0.00548  | 0.00038  |
| 9615  | 2020.03 | 124.0 | 3.51 | -0.24 | -0.0173 | 0.0319 | 23.98 | 1.180 | 0.682  | 2.4868 | -0.03201   | -0.01719 | -0.06165 | -0.01287 | -0.00691 | -0.02479 | 0.00254  | 0.00554  | -0.00033 |
| 9616  | 2019.60 | 124.2 | 3.51 | -0.23 | -0.0160 | 0.0354 | 24.11 | 1.180 | 0.796  | 2.4871 | -0.02795</ |          |          |          |          |          |          |          |          |

Table A14. Continued.

Run = 144

M = 1.80

xsppos = 42.348

| point | p0      | t0    | rnft | alpha | cnmrc   | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c  |
|-------|---------|-------|------|-------|---------|--------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|---------|
| 9636  | 2019.74 | 124.0 | 3.51 | -0.24 | -0.0156 | 0.0254 | 26.61 | 1.180 | 3.305  | 2.4869 | -0.02622 | -0.01908 | -0.05546 | -0.01054 | -0.00767 | -0.02230 | 0.00487  | 0.00478  | 0.00216 |
| 9637  | 2019.89 | 124.0 | 3.51 | -0.24 | -0.0163 | 0.0287 | 26.73 | 1.180 | 3.431  | 2.4853 | -0.02345 | -0.01743 | -0.04949 | -0.00943 | -0.00701 | -0.01991 | 0.00597  | 0.00544  | 0.00454 |
| 9638  | 2020.03 | 123.9 | 3.51 | -0.23 | -0.0136 | 0.0237 | 26.86 | 1.180 | 3.544  | 2.4855 | -0.02443 | -0.01740 | -0.04783 | -0.00983 | -0.00700 | -0.01925 | 0.00558  | 0.00545  | 0.00521 |
| 9639  | 2020.03 | 124.1 | 3.51 | -0.24 | -0.0156 | 0.0244 | 26.99 | 1.180 | 3.680  | 2.4866 | -0.02473 | -0.01631 | -0.04752 | -0.00994 | -0.00656 | -0.01911 | 0.00546  | 0.00589  | 0.00534 |
| 9640  | 2020.03 | 123.9 | 3.51 | -0.23 | -0.0146 | 0.0269 | 27.11 | 1.180 | 3.798  | 2.4874 | -0.02497 | -0.01802 | -0.04916 | -0.01004 | -0.00725 | -0.01976 | 0.00537  | 0.00521  | 0.00469 |
| 9641  | 2019.89 | 124.0 | 3.51 | -0.23 | -0.0139 | 0.0254 | 27.24 | 1.180 | 3.921  | 2.4859 | -0.02281 | -0.01500 | -0.04805 | -0.00918 | -0.00604 | -0.01933 | 0.00623  | 0.00642  | 0.00513 |
| 9642  | 2019.89 | 124.0 | 3.51 | -0.24 | -0.0156 | 0.0272 | 27.36 | 1.180 | 4.055  | 2.4878 | -0.02354 | -0.01693 | -0.05048 | -0.00946 | -0.00681 | -0.02029 | 0.00595  | 0.00565  | 0.00416 |
| 9643  | 2019.89 | 123.9 | 3.51 | -0.22 | -0.0129 | 0.0194 | 27.49 | 1.181 | 4.162  | 2.4879 | -0.02355 | -0.01647 | -0.05178 | -0.00947 | -0.00662 | -0.02081 | 0.00594  | 0.00583  | 0.00364 |
| 9644  | 2020.18 | 123.9 | 3.51 | -0.24 | -0.0146 | 0.0259 | 27.61 | 1.180 | 4.305  | 2.4872 | -0.02173 | -0.01591 | -0.05062 | -0.00874 | -0.00640 | -0.02035 | 0.00667  | 0.00606  | 0.00410 |
| 9645  | 2019.89 | 124.0 | 3.51 | -0.25 | -0.0163 | 0.0241 | 27.73 | 1.179 | 4.438  | 2.4868 | -0.02145 | -0.01716 | -0.05062 | -0.00863 | -0.00690 | -0.02035 | 0.00678  | 0.00555  | 0.00410 |
| 9646  | 2020.18 | 123.9 | 3.51 | -0.23 | -0.0136 | 0.0209 | 27.86 | 1.181 | 4.536  | 2.4873 | -0.02106 | -0.01836 | -0.05092 | -0.00847 | -0.00738 | -0.02047 | 0.00694  | 0.00507  | 0.00398 |
| 9647  | 2019.60 | 123.8 | 3.51 | -0.25 | -0.0163 | 0.0250 | 27.99 | 1.179 | 4.687  | 2.4859 | -0.02080 | -0.01880 | -0.05005 | -0.00837 | -0.00756 | -0.02013 | 0.00704  | 0.00489  | 0.00432 |
| 9648  | 2020.03 | 123.8 | 3.51 | -0.23 | -0.0139 | 0.0235 | 28.11 | 1.180 | 4.788  | 2.4868 | -0.02319 | -0.01616 | -0.05049 | -0.00933 | -0.00650 | -0.02030 | 0.00608  | 0.00596  | 0.00415 |
| 9649  | 2019.89 | 124.0 | 3.51 | -0.23 | -0.0149 | 0.0276 | 28.24 | 1.180 | 4.920  | 2.4855 | -0.02237 | -0.01269 | -0.04847 | -0.00900 | -0.00511 | -0.01950 | 0.00641  | 0.00735  | 0.00496 |
| 9650  | 2019.89 | 124.2 | 3.51 | -0.23 | -0.0142 | 0.0243 | 28.36 | 1.180 | 5.045  | 2.4863 | -0.02259 | -0.01170 | -0.04992 | -0.00909 | -0.00470 | -0.02008 | 0.00632  | 0.00775  | 0.00438 |
| 9651  | 2019.60 | 124.1 | 3.51 | -0.24 | -0.0153 | 0.0284 | 28.49 | 1.180 | 5.179  | 2.4874 | -0.02295 | -0.01320 | -0.05081 | -0.00923 | -0.00531 | -0.02043 | 0.00618  | 0.00715  | 0.00403 |
| 9652  | 2020.03 | 124.2 | 3.51 | -0.24 | -0.0156 | 0.0291 | 28.61 | 1.180 | 5.310  | 2.4864 | -0.01810 | -0.01008 | -0.04940 | -0.00728 | -0.00406 | -0.01987 | 0.00813  | 0.00840  | 0.00459 |
| 9653  | 2019.60 | 124.3 | 3.51 | -0.24 | -0.0146 | 0.0278 | 28.74 | 1.180 | 5.428  | 2.4861 | -0.01682 | -0.01336 | -0.04976 | -0.00677 | -0.00537 | -0.02002 | 0.00864  | 0.00708  | 0.00444 |
| 9654  | 2019.89 | 124.1 | 3.51 | -0.24 | -0.0143 | 0.0308 | 28.86 | 1.180 | 5.547  | 2.4857 | -0.01585 | -0.01151 | -0.04814 | -0.00638 | -0.00463 | -0.01937 | 0.00903  | 0.00782  | 0.00509 |
| 9655  | 2019.89 | 124.1 | 3.51 | -0.25 | -0.0153 | 0.0293 | 28.99 | 1.179 | 5.688  | 2.4873 | -0.01598 | -0.01433 | -0.04811 | -0.00642 | -0.00576 | -0.01934 | 0.00899  | 0.00669  | 0.00511 |
| 9656  | 2020.03 | 124.1 | 3.51 | -0.25 | -0.0156 | 0.0291 | 29.11 | 1.179 | 5.812  | 2.4870 | -0.01745 | -0.01347 | -0.04609 | -0.00702 | -0.00541 | -0.01853 | 0.00839  | 0.00704  | 0.00593 |
| 9657  | 2019.89 | 124.2 | 3.51 | -0.25 | -0.0153 | 0.0321 | 29.23 | 1.179 | 5.935  | 2.4864 | -0.01875 | -0.01432 | -0.04696 | -0.00754 | -0.00576 | -0.01889 | 0.00787  | 0.00670  | 0.00557 |
| 9658  | 2020.03 | 124.0 | 3.51 | -0.24 | -0.0146 | 0.0297 | 29.36 | 1.180 | 6.051  | 2.4878 | -0.02057 | -0.01559 | -0.04766 | -0.00827 | -0.00627 | -0.01916 | 0.00714  | 0.00619  | 0.00530 |
| 9659  | 2020.03 | 124.0 | 3.51 | -0.23 | -0.0149 | 0.0304 | 29.49 | 1.180 | 6.172  | 2.4868 | -0.02083 | -0.01608 | -0.04612 | -0.00838 | -0.00647 | -0.01855 | 0.00703  | 0.00599  | 0.00591 |
| 9660  | 2019.60 | 124.1 | 3.51 | -0.25 | -0.0160 | 0.0289 | 29.61 | 1.179 | 6.314  | 2.4853 | -0.01866 | -0.01494 | -0.04710 | -0.00751 | -0.00601 | -0.01895 | 0.00790  | 0.00644  | 0.00550 |
| 9661  | 2019.74 | 124.1 | 3.51 | -0.24 | -0.0149 | 0.0295 | 29.74 | 1.180 | 6.430  | 2.4870 | -0.02151 | -0.01454 | -0.04950 | -0.00865 | -0.00585 | -0.01990 | 0.00676  | 0.00661  | 0.00456 |
| 9662  | 2019.89 | 124.0 | 3.51 | -0.26 | -0.0166 | 0.0304 | 29.86 | 1.179 | 6.576  | 2.4887 | -0.02202 | -0.01570 | -0.05188 | -0.00885 | -0.00631 | -0.02085 | 0.00656  | 0.00615  | 0.00361 |
| 9663  | 2020.61 | 124.2 | 3.51 | -0.23 | -0.0125 | 0.0280 | 29.99 | 1.180 | 6.668  | 2.4871 | -0.01923 | -0.01002 | -0.04694 | -0.00773 | -0.00403 | -0.01888 | 0.00768  | 0.00843  | 0.00558 |
| 9664  | 2020.18 | 124.0 | 3.51 | -0.25 | -0.0156 | 0.0272 | 30.11 | 1.179 | 6.816  | 2.4877 | -0.02034 | -0.01263 | -0.04586 | -0.00818 | -0.00508 | -0.01843 | 0.00723  | 0.00738  | 0.00602 |
| 9665  | 2020.32 | 124.0 | 3.51 | -0.24 | -0.0149 | 0.0267 | 30.24 | 1.180 | 6.933  | 2.4870 | -0.01824 | -0.01048 | -0.04300 | -0.00734 | -0.00421 | -0.01729 | 0.00807  | 0.00824  | 0.00717 |
| 9666  | 2020.03 | 124.0 | 3.51 | -0.25 | -0.0149 | 0.0295 | 30.36 | 1.179 | 7.060  | 2.4865 | -0.01697 | -0.01095 | -0.04162 | -0.00683 | -0.00440 | -0.01674 | 0.00858  | 0.00805  | 0.00772 |
| 9667  | 2020.03 | 124.0 | 3.51 | -0.24 | -0.0136 | 0.0274 | 30.49 | 1.180 | 7.175  | 2.4872 | -0.01531 | -0.01001 | -0.04248 | -0.00615 | -0.00402 | -0.01708 | 0.00925  | 0.00843  | 0.00738 |
| 9668  | 2020.18 | 123.8 | 3.51 | -0.23 | -0.0129 | 0.0259 | 30.50 | 1.180 | 7.184  | 2.4865 | -0.01535 | -0.00964 | -0.04068 | -0.00618 | -0.00388 | -0.01636 | 0.00923  | 0.00858  | 0.00809 |
| 9669  | 2020.03 | 123.9 | 3.51 | -0.25 | -0.0153 | 0.0274 | 30.74 | 1.180 | 7.433  | 2.4878 | -0.01762 | -0.01188 | -0.04415 | -0.00708 | -0.00477 | -0.01775 | 0.00833  | 0.00768  | 0.00671 |
| 9670  | 2019.74 | 123.8 | 3.51 | -0.25 | -0.0143 | 0.0298 | 30.86 | 1.179 | 7.570  | 2.4877 | -0.01745 | -0.01178 | -0.04415 | -0.00701 | -0.00474 | -0.01775 | 0.00840  | 0.00772  | 0.00671 |
| 9671  | 2019.60 | 123.9 | 3.51 | -0.25 | -0.0146 | 0.0259 | 30.99 | 1.180 | 7.684  | 2.4870 | -0.01733 | -0.01196 | -0.04336 | -0.00697 | -0.00481 | -0.01743 | 0.00844  | 0.00764  | 0.00702 |
| 9672  | 2019.89 | 123.9 | 3.51 | -0.25 | -0.0163 | 0.0269 | 31.11 | 1.179 | 7.819  | 2.4862 | -0.01774 | -0.01095 | -0.04523 | -0.00713 | -0.00440 | -0.01819 | 0.00828  | 0.00805  | 0.00626 |
| 9673  | 2020.18 | 124.3 | 3.51 | -0.23 | -0.0129 | 0.0222 | 31.24 | 1.180 | 7.924  | 2.4868 | -0.01631 | -0.00959 | -0.04523 | -0.00656 | -0.00386 | -0.01819 | 0.00885  | 0.00860  | 0.00627 |
| 9674  | 2019.89 | 124.2 | 3.51 | -0.24 | -0.0143 | 0.0298 | 31.36 | 1.180 | 8.058  | 2.4865 | -0.01662 | -0.01186 | -0.04546 | -0.00669 | -0.00477 | -0.01828 | 0.00872  | 0.00769  | 0.00617 |
| 9675  | 2019.74 | 123.9 | 3.51 | -0.25 | -0.0149 | 0.0258 | 31.49 | 1.179 | 8.193  | 2.4868 | -0.01758 | -0.01401 | -0.04527 | -0.00707 | -0.00563 | -0.01820 | 0.00834  | 0.00682  | 0.00625 |
| 9676  | 2020.18 | 123.9 | 3.51 | -0.25 | -0.0129 | 0.0232 | 31.61 | 1.180 | 8.307  | 2.4865 | -0.01696 | -0.01512 | -0.04400 | -0.00682 | -0.00608 | -0.01769 | 0.00859  | 0.00637  | 0.00676 |
| 9677  | 2020.03 | 123.8 | 3.51 | -0.24 | -0.0129 | 0.0259 | 31.74 | 1.180 | 8.430  | 2.4872 | -0.01824 | -0.01948 | -0.04276 | -0.00733 | -0.00783 | -0.01719 | 0.00808  | 0.00462  | 0.00727 |
| 9678  | 2019.89 | 123.9 | 3.51 | -0.24 | -0.0129 | 0.0259 | 31.86 | 1.180 | 8.554  | 2.4867 | -0.01909 | -0.02186 | -0.04229 | -0.00768 | -0.00879 | -0.01701 | 0.00773  | 0.00366  | 0.00745 |
| 9679  | 2019.89 | 124.1 | 3.51 | -0.25 | -0.0153 | 0.0265 | 31.99 | 1.179 | 8.684  | 2.4887 | -0.02428 | -0.02631 | -0.04556 | -0.00976 | -0.01057 | -0.01831 | 0.00565  | 0.00188  | 0.00615 |
| 9680  | 2019.89 | 124.0 | 3.51 | -0.24 | -0.0129 | 0.0278 | 32.11 | 1.180 | 8.801  | 2.4866 | -0.02507 | -0.02405 | -0.04300 | -0.01008 | -0.00967 | -0.01729 | 0.00533  | 0.00278  | 0.00716 |
| 9681  | 2019.89 | 124.0 | 3.51 | -0.24 | -0.0149 | 0.0304 | 32.24 | 1.180 | 8.930  | 2.4867 | -0.02931 | -0.02807 | -0.04453 | -0.01179 | -0.01129 | -0.01791 | 0.00362  | 0.00117  | 0.00655 |
| 9682  | 2020.32 | 123.7 | 3.51 | -0.26 | -0.0166 | 0.0322 | 32.36 | 1.179 | 9.079  | 2.4878 | -0.03281 | -0.03034 | -0.04624 | -0.01319 | -0.01219 | -0.01859 | 0.00222  | 0.00026  | 0.00587 |
| 9683  | 2020.46 | 123.6 | 3.51 | -0.25 | -0.0139 | 0.0272 | 32.49 | 1.179 | 9.187  | 2.4881 | -0.03397 | -0.03334 | -0.04559 | -0.01365 | -0.01340 | -0.01832 | 0.00176  | -0.00095 | 0.00614 |
| 9684  | 2020.18 | 123.8 | 3.51 | -0.24 | -0.0139 | 0.0291 | 32.61 | 1.180 | 9.305  | 2.4880 | -0.03619 | -0.03736 | -0.04600 | -0.01455 | -0.01501 | -0.01849 | 0.00086  | -0.00256 | 0.00597 |
| 9685  | 2019.60 | 123.9 | 3.51 | -0.25 | -0.0153 | 0.0256 | 32.74 | 1.179 | 9.439  | 2.4863 | -0.03797 | -0.04244 | -0.04449 | -0.01527 | -0.01707 | -0.01789 | 0.00014  | -0.00462 | 0.00656 |
| 9686  | 2019.74 | 123.8 | 3.51 | -0.25 | -0.0160 | 0.0289 | 32.86 | 1.179 | 9.562  | 2.4866 | -0.03980 | -0.04736 | -0.04597 | -0.01601 | -0.01905 | -0.01849 | -0.00060 | -0.00659 | 0.00597 |
| 9687  | 2019.89 | 124.0 | 3.51 | -0.25 | -0.0142 | 0.0289 | 32.99 | 1.180 | 9.684  | 2.4870 | -0.04589 | -0.05341 | -0.04422 | -0.01845 | -0.02148 | -0.01778 | -0.00304 | -0.00902 | 0.00667 |
| 9688  | 2019.89 | 124.1 | 3.51 | -0.25 | -0.0160 | 0.0270 | 33.11 | 1.179 | 9.816  | 2.4872 | -0.05251 | -0.06119 | -0.04574 | -0.02111 | -0.02460 | -0.01839 | -0.00570 | -0.01215 | 0.00607 |
| 9689  | 2020.18 | 124.1 | 3.51 | -0.26 | -0.0156 | 0.0300 | 33.23 | 1.179 | 9.947  | 2.4872 | -0.05718 | -        |          |          |          |          |          |          |         |



Table A14. Concluded.

Run = 142

M = 1.80

xsppos = 42.348

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 9289  | 2020.03 | 124.2 | 3.51 | 0.28  | 0.0084 | 0.0014 | 35.61 | 1.185 | 12.211 | 2.4864 | -0.04595 | -0.03529 | -0.08975 | -0.01848 | -0.01419 | -0.03609 | -0.00306 | -0.00149 | -0.01163 |
| 9290  | 2020.03 | 124.1 | 3.51 | 0.27  | 0.0084 | 0.0032 | 35.74 | 1.184 | 12.349 | 2.4859 | -0.04289 | -0.03357 | -0.08224 | -0.01725 | -0.01350 | -0.03308 | -0.00183 | -0.00080 | -0.00862 |
| 9291  | 2020.03 | 124.0 | 3.51 | 0.27  | 0.0101 | 0.0004 | 35.86 | 1.184 | 12.471 | 2.4861 | -0.04100 | -0.03195 | -0.08029 | -0.01649 | -0.01285 | -0.03230 | -0.00107 | -0.00015 | -0.00783 |
| 9292  | 2020.18 | 123.9 | 3.51 | 0.28  | 0.0087 | 0.0025 | 35.99 | 1.184 | 12.593 | 2.4864 | -0.04022 | -0.03121 | -0.08029 | -0.01618 | -0.01255 | -0.03229 | -0.00075 | 0.00015  | -0.00783 |
| 9293  | 2020.18 | 124.0 | 3.51 | 0.26  | 0.0060 | 0.0075 | 36.11 | 1.183 | 12.732 | 2.4864 | -0.03944 | -0.03022 | -0.07698 | -0.01586 | -0.01216 | -0.03096 | -0.00044 | 0.00055  | -0.00650 |
| 9294  | 2020.32 | 124.1 | 3.51 | 0.27  | 0.0098 | 0.0040 | 36.23 | 1.184 | 12.847 | 2.4872 | -0.04033 | -0.03087 | -0.07575 | -0.01622 | -0.01241 | -0.03045 | -0.00079 | 0.00029  | -0.00599 |
| 9295  | 2019.89 | 124.0 | 3.51 | 0.27  | 0.0084 | 0.0023 | 36.36 | 1.184 | 12.973 | 2.4873 | -0.03929 | -0.03160 | -0.07305 | -0.01580 | -0.01271 | -0.02937 | -0.00037 | 0.00000  | -0.00490 |
| 9296  | 2019.89 | 123.9 | 3.51 | 0.26  | 0.0077 | 0.0056 | 36.49 | 1.184 | 13.103 | 2.4862 | -0.03858 | -0.03174 | -0.06696 | -0.01552 | -0.01277 | -0.02693 | -0.00009 | -0.00006 | -0.00247 |
| 9297  | 2020.03 | 124.0 | 3.51 | 0.27  | 0.0080 | 0.0067 | 36.61 | 1.184 | 13.226 | 2.4864 | -0.03914 | -0.03267 | -0.06541 | -0.01574 | -0.01314 | -0.02631 | -0.00032 | -0.00043 | -0.00184 |
| 9298  | 2020.18 | 124.1 | 3.51 | 0.26  | 0.0060 | 0.0084 | 36.74 | 1.183 | 13.359 | 2.4864 | -0.03768 | -0.03279 | -0.06258 | -0.01515 | -0.01319 | -0.02517 | 0.00027  | -0.00048 | -0.00071 |
| 9299  | 2019.74 | 124.1 | 3.51 | 0.28  | 0.0101 | 0.0032 | 36.86 | 1.184 | 13.463 | 2.4860 | -0.03757 | -0.03492 | -0.06377 | -0.01511 | -0.01405 | -0.02565 | 0.00031  | -0.00134 | -0.00119 |
| 9300  | 2020.03 | 123.9 | 3.51 | 0.27  | 0.0091 | 0.0092 | 36.98 | 1.184 | 13.592 | 2.4862 | -0.03868 | -0.03619 | -0.06400 | -0.01556 | -0.01455 | -0.02574 | -0.00013 | -0.00185 | -0.00128 |
| 9301  | 2019.89 | 123.9 | 3.51 | 0.26  | 0.0046 | 0.0095 | 37.11 | 1.183 | 13.736 | 2.4864 | -0.03998 | -0.03767 | -0.06430 | -0.01608 | -0.01515 | -0.02586 | -0.00066 | -0.00245 | -0.00140 |
| 9302  | 2020.18 | 123.9 | 3.51 | 0.27  | 0.0077 | 0.0075 | 37.24 | 1.184 | 13.851 | 2.4865 | -0.04066 | -0.03907 | -0.06511 | -0.01635 | -0.01571 | -0.02619 | -0.00093 | -0.00301 | -0.00172 |
| 9303  | 2020.18 | 123.8 | 3.51 | 0.26  | 0.0077 | 0.0075 | 37.36 | 1.183 | 13.980 | 2.4866 | -0.04303 | -0.03960 | -0.06423 | -0.01731 | -0.01593 | -0.02583 | -0.00188 | -0.00322 | -0.00137 |
| 9304  | 2020.03 | 123.9 | 3.51 | 0.26  | 0.0091 | 0.0082 | 37.48 | 1.183 | 14.103 | 2.4867 | -0.04362 | -0.03998 | -0.06619 | -0.01754 | -0.01608 | -0.02662 | -0.00212 | -0.00337 | -0.00215 |
| 9305  | 2019.89 | 124.1 | 3.51 | 0.27  | 0.0101 | 0.0023 | 37.61 | 1.184 | 14.217 | 2.4865 | -0.04565 | -0.03724 | -0.06733 | -0.01836 | -0.01498 | -0.02708 | -0.00294 | -0.00227 | -0.00262 |
| 9306  | 2019.89 | 124.2 | 3.51 | 0.28  | 0.0091 | 0.0036 | 37.74 | 1.184 | 14.337 | 2.4871 | -0.04674 | -0.03189 | -0.06715 | -0.01879 | -0.01282 | -0.02700 | -0.00337 | -0.00012 | -0.00253 |
| 9307  | 2019.89 | 124.1 | 3.51 | 0.27  | 0.0084 | 0.0051 | 37.86 | 1.184 | 14.474 | 2.4872 | -0.04470 | -0.03015 | -0.06658 | -0.01797 | -0.01212 | -0.02677 | -0.00255 | 0.00058  | -0.00230 |
| 9308  | 2020.32 | 124.1 | 3.51 | 0.28  | 0.0084 | 0.0069 | 37.99 | 1.184 | 14.592 | 2.4874 | -0.04159 | -0.03025 | -0.06684 | -0.01672 | -0.01216 | -0.02687 | -0.00130 | 0.00054  | -0.00241 |
| 9309  | 2020.03 | 123.8 | 3.51 | 0.27  | 0.0080 | 0.0058 | 38.11 | 1.184 | 14.725 | 2.4871 | -0.03643 | -0.03229 | -0.06755 | -0.01465 | -0.01298 | -0.02716 | 0.00078  | -0.00028 | -0.00269 |
| 9310  | 2020.18 | 123.8 | 3.51 | 0.26  | 0.0087 | 0.0099 | 38.24 | 1.183 | 14.855 | 2.4868 | -0.03442 | -0.03381 | -0.06670 | -0.01384 | -0.01359 | -0.02682 | 0.00158  | -0.00089 | -0.00236 |
| 9311  | 2020.46 | 123.6 | 3.51 | 0.28  | 0.0084 | 0.0088 | 38.36 | 1.184 | 14.969 | 2.4866 | -0.03516 | -0.03688 | -0.06624 | -0.01414 | -0.01483 | -0.02664 | 0.00128  | -0.00213 | -0.00217 |
| 9312  | 2019.74 | 123.8 | 3.51 | 0.28  | 0.0087 | 0.0071 | 38.49 | 1.184 | 15.094 | 2.4864 | -0.03755 | -0.03875 | -0.06537 | -0.01510 | -0.01558 | -0.02629 | 0.00032  | -0.00288 | -0.00182 |
| 9313  | 2019.89 | 124.1 | 3.51 | 0.27  | 0.0094 | 0.0056 | 38.61 | 1.184 | 15.223 | 2.4865 | -0.04120 | -0.03671 | -0.06649 | -0.01657 | -0.01476 | -0.02674 | -0.00115 | -0.00206 | -0.00228 |
| 9314  | 2020.18 | 123.9 | 3.51 | 0.27  | 0.0087 | 0.0071 | 38.74 | 1.184 | 15.348 | 2.4868 | -0.04467 | -0.03598 | -0.06779 | -0.01796 | -0.01447 | -0.02726 | -0.00254 | -0.00176 | -0.00280 |
| 9315  | 2019.89 | 124.1 | 3.51 | 0.27  | 0.0080 | 0.0067 | 38.86 | 1.184 | 15.475 | 2.4872 | -0.04723 | -0.03030 | -0.06907 | -0.01899 | -0.01218 | -0.02777 | -0.00356 | 0.00052  | -0.00331 |
| 9316  | 2020.03 | 124.0 | 3.51 | 0.27  | 0.0084 | 0.0041 | 38.99 | 1.184 | 15.599 | 2.4873 | -0.04412 | -0.02751 | -0.07047 | -0.01774 | -0.01106 | -0.02833 | -0.00232 | 0.00164  | -0.00387 |
| 9317  | 2019.74 | 123.8 | 3.51 | 0.27  | 0.0080 | 0.0077 | 39.11 | 1.184 | 15.724 | 2.4867 | -0.04016 | -0.02765 | -0.07155 | -0.01615 | -0.01112 | -0.02877 | -0.00073 | 0.00159  | -0.00431 |
| 9318  | 2020.03 | 124.1 | 3.51 | 0.28  | 0.0097 | 0.0095 | 39.23 | 1.184 | 15.835 | 2.4865 | -0.03743 | -0.02634 | -0.07197 | -0.01505 | -0.01059 | -0.02895 | 0.00037  | 0.00211  | -0.00448 |
| 9319  | 2020.32 | 124.1 | 3.51 | 0.27  | 0.0084 | 0.0079 | 39.36 | 1.184 | 15.973 | 2.4878 | -0.03405 | -0.02730 | -0.06998 | -0.01369 | -0.01097 | -0.02813 | 0.00174  | 0.00173  | -0.00366 |
| 9320  | 2020.32 | 124.0 | 3.51 | 0.27  | 0.0101 | 0.0079 | 39.49 | 1.184 | 16.097 | 2.4874 | -0.03279 | -0.02657 | -0.06675 | -0.01318 | -0.01068 | -0.02684 | 0.00224  | 0.00202  | -0.00237 |
| 9321  | 2019.60 | 124.2 | 3.51 | 0.27  | 0.0060 | 0.0084 | 39.61 | 1.184 | 16.229 | 2.4866 | -0.03306 | -0.02795 | -0.06009 | -0.01330 | -0.01124 | -0.02417 | 0.00213  | 0.00146  | 0.00030  |
| 9322  | 2020.32 | 124.2 | 3.51 | 0.27  | 0.0063 | 0.0086 | 39.74 | 1.184 | 16.346 | 2.4877 | -0.03437 | -0.02818 | -0.05839 | -0.01382 | -0.01133 | -0.02347 | 0.00161  | 0.00138  | 0.00099  |
| 9323  | 2019.60 | 124.1 | 3.51 | 0.27  | 0.0073 | 0.0101 | 39.86 | 1.184 | 16.472 | 2.4866 | -0.03490 | -0.02936 | -0.05968 | -0.01404 | -0.01181 | -0.02400 | 0.00139  | 0.00090  | 0.00046  |
| 9324  | 2020.18 | 124.1 | 3.51 | 0.26  | 0.0080 | 0.0067 | 39.99 | 1.183 | 16.609 | 2.4867 | -0.03451 | -0.02884 | -0.06289 | -0.01388 | -0.01160 | -0.02529 | 0.00155  | 0.00111  | -0.00082 |
| 9325  | 2020.18 | 124.1 | 3.51 | 0.27  | 0.0094 | 0.0056 | 40.11 | 1.184 | 16.722 | 2.4870 | -0.03449 | -0.02906 | -0.06511 | -0.01387 | -0.01168 | -0.02618 | 0.00155  | 0.00102  | -0.00172 |
| 9326  | 2020.03 | 124.1 | 3.51 | 0.28  | 0.0091 | 0.0036 | 40.24 | 1.184 | 16.841 | 2.4855 | -0.03302 | -0.02846 | -0.06780 | -0.01328 | -0.01145 | -0.02728 | 0.00214  | 0.00125  | -0.00281 |
| 9327  | 2019.89 | 124.1 | 3.51 | 0.30  | 0.0094 | 0.0056 | 40.36 | 1.185 | 16.947 | 2.4866 | -0.03520 | -0.02910 | -0.07100 | -0.01416 | -0.01170 | -0.02855 | 0.00127  | 0.00100  | -0.00409 |
| 9328  | 2019.89 | 124.0 | 3.51 | 0.27  | 0.0056 | 0.0091 | 40.49 | 1.184 | 17.098 | 2.4868 | -0.03619 | -0.02986 | -0.07046 | -0.01455 | -0.01201 | -0.02833 | 0.00087  | 0.00070  | -0.00387 |
| 9329  | 2020.32 | 124.0 | 3.51 | 0.28  | 0.0070 | 0.0062 | 40.61 | 1.184 | 17.216 | 2.4874 | -0.03609 | -0.03188 | -0.06665 | -0.01451 | -0.01281 | -0.02679 | 0.00091  | -0.00011 | -0.00233 |
| 9330  | 2019.60 | 124.2 | 3.51 | 0.26  | 0.0046 | 0.0086 | 40.73 | 1.183 | 17.364 | 2.4873 | -0.03808 | -0.03074 | -0.06054 | -0.01531 | -0.01236 | -0.02434 | 0.00012  | 0.00035  | 0.00013  |
| 9331  | 2019.74 | 124.0 | 3.51 | 0.27  | 0.0091 | 0.0055 | 40.86 | 1.184 | 17.474 | 2.4862 | -0.03621 | -0.03024 | -0.05715 | -0.01457 | -0.01216 | -0.02299 | 0.00086  | 0.00054  | 0.00148  |
| 9332  | 2020.03 | 123.8 | 3.51 | 0.27  | 0.0073 | 0.0101 | 40.99 | 1.184 | 17.600 | 2.4866 | -0.03565 | -0.02949 | -0.05684 | -0.01433 | -0.01186 | -0.02286 | 0.00109  | 0.00085  | 0.00161  |
| 9333  | 2019.74 | 123.9 | 3.51 | 0.26  | 0.0074 | 0.0054 | 41.11 | 1.183 | 17.733 | 2.4866 | -0.03580 | -0.02958 | -0.05609 | -0.01440 | -0.01190 | -0.02256 | 0.00103  | 0.00081  | 0.00191  |
| 9334  | 2020.18 | 124.0 | 3.51 | 0.27  | 0.0067 | 0.0060 | 41.24 | 1.184 | 17.852 | 2.4864 | -0.03479 | -0.02922 | -0.05663 | -0.01399 | -0.01175 | -0.02278 | 0.00143  | 0.00095  | 0.00169  |
| 9335  | 2020.18 | 123.9 | 3.51 | 0.27  | 0.0080 | 0.0002 | 41.36 | 1.184 | 17.966 | 2.4859 | -0.03450 | -0.02737 | -0.05640 | -0.01388 | -0.01101 | -0.02269 | 0.00155  | 0.00169  | 0.00178  |
| 9336  | 2020.18 | 124.2 | 3.51 | 0.27  | 0.0060 | 0.0047 | 41.49 | 1.183 | 18.105 | 2.4872 | -0.03648 | -0.02931 | -0.05834 | -0.01467 | -0.01179 | -0.02346 | 0.00075  | 0.00092  | 0.00101  |
| 9337  | 2020.18 | 124.1 | 3.51 | 0.27  | 0.0070 | 0.0025 | 41.61 | 1.184 | 18.221 | 2.4867 | -0.03546 | -0.02957 | -0.05807 | -0.01426 | -0.01189 | -0.02335 | 0.00116  | 0.00081  | 0.00111  |
| 9338  | 2020.32 | 124.1 | 3.51 | 0.27  | 0.0084 | 0.0032 | 41.73 | 1.184 | 18.343 | 2.4878 | -0.03596 | -0.03058 | -0.06037 | -0.01446 | -0.01229 | -0.02427 | 0.00097  | 0.00041  | 0.00020  |
| 9339  | 2020.03 | 123.9 | 3.51 | 0.27  | 0.0080 | 0.0012 | 41.86 | 1.184 | 18.472 | 2.4871 | -0.03621 | -0.02946 | -0.05954 | -0.01456 | -0.01184 | -0.02394 | 0.00086  | 0.00086  | 0.00053  |
| 9340  | 2020.32 | 123.9 | 3.51 | 0.26  | 0.0063 | 0.0077 | 41.98 | 1.183 | 18.609 | 2.4865 | -0.03534 | -0.02841 | -0.05906 | -0.01421 | -0.01143 | -0.02375 | 0.00121  | 0.00128  | 0.00071  |
| 9341  | 2019.60 | 124.1 | 3.51 | 0.28  | 0.0080 | 0.0058 | 42.11 | 1.184 | 18.715 | 2.4866 | -0.03699 | -0.02881 | -0.06051 | -0.01488 | -0.01159 | -0.02433 | 0.00055  | 0.00112  | 0.00013  |
| 9342  | 2020.32 | 124.0 | 3.51 | 0.27  | 0.0084 | 0.0023 |       |       |        |        |          |          |          |          |          |          |          |          |          |

Table A15. Run 148.

Run = 148

M = 1.60

xsp05 = 40.351

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 9784  | 1885.68 | 124.3 | 3.50 | 0.23  | 0.0166 | 0.0292 | 21.36 | 1.675 | -6.257 | 3.1310 | -0.00543 | -0.01327 | -0.04354 | -0.00173 | -0.00424 | -0.01391 | 0.00006  | -0.00015 | 0.00007  |
| 9785  | 1888.56 | 124.0 | 3.51 | 0.24  | 0.0221 | 0.0229 | 21.49 | 1.676 | -6.144 | 3.1353 | -0.00530 | -0.01274 | -0.04340 | -0.00169 | -0.00406 | -0.01384 | 0.00010  | 0.00002  | 0.00014  |
| 9786  | 1886.40 | 124.2 | 3.50 | 0.24  | 0.0211 | 0.0205 | 21.61 | 1.676 | -6.020 | 3.1317 | -0.00510 | -0.01150 | -0.04389 | -0.00163 | -0.00367 | -0.01402 | 0.00016  | 0.00041  | -0.00003 |
| 9787  | 1888.70 | 124.0 | 3.51 | 0.23  | 0.0183 | 0.0264 | 21.74 | 1.676 | -5.885 | 3.1360 | -0.00632 | -0.01351 | -0.04386 | -0.00202 | -0.00431 | -0.01398 | -0.00022 | -0.00022 | 0.00000  |
| 9788  | 1887.41 | 124.2 | 3.51 | 0.24  | 0.0211 | 0.0251 | 21.87 | 1.676 | -5.767 | 3.1334 | -0.00595 | -0.01298 | -0.04436 | -0.00190 | -0.00414 | -0.01416 | -0.00010 | -0.00006 | -0.00018 |
| 9789  | 1889.14 | 124.0 | 3.51 | 0.24  | 0.0221 | 0.0229 | 21.99 | 1.676 | -5.645 | 3.1358 | -0.00546 | -0.01225 | -0.04275 | -0.00174 | -0.00391 | -0.01363 | 0.00005  | 0.00018  | 0.00035  |
| 9790  | 1887.84 | 124.3 | 3.51 | 0.24  | 0.0211 | 0.0260 | 22.11 | 1.676 | -5.518 | 3.1341 | -0.00751 | -0.01249 | -0.04446 | -0.00240 | -0.00399 | -0.01419 | -0.00060 | 0.00010  | -0.00021 |
| 9791  | 1888.56 | 124.1 | 3.51 | 0.24  | 0.0224 | 0.0268 | 22.24 | 1.676 | -5.393 | 3.1353 | -0.00666 | -0.01123 | -0.04393 | -0.00212 | -0.00358 | -0.01401 | -0.00033 | 0.00050  | -0.00003 |
| 9792  | 1887.55 | 124.1 | 3.51 | 0.24  | 0.0200 | 0.0301 | 22.37 | 1.676 | -5.262 | 3.1341 | -0.00627 | -0.01237 | -0.04411 | -0.00200 | -0.00395 | -0.01408 | -0.00021 | 0.00014  | -0.00009 |
| 9793  | 1889.28 | 124.1 | 3.51 | 0.24  | 0.0186 | 0.0377 | 22.49 | 1.676 | -5.136 | 3.1361 | -0.00459 | -0.01187 | -0.04337 | -0.00146 | -0.00379 | -0.01383 | 0.00033  | 0.00030  | 0.00015  |
| 9794  | 1888.13 | 124.0 | 3.51 | 0.24  | 0.0207 | 0.0268 | 22.62 | 1.676 | -5.016 | 3.1350 | -0.00698 | -0.01256 | -0.04367 | -0.00223 | -0.00401 | -0.01393 | -0.00043 | 0.00008  | 0.00005  |
| 9795  | 1887.12 | 124.1 | 3.51 | 0.24  | 0.0190 | 0.0268 | 22.74 | 1.676 | -4.891 | 3.1340 | -0.00646 | -0.01273 | -0.04489 | -0.00206 | -0.00406 | -0.01432 | -0.00027 | 0.00002  | -0.00034 |
| 9796  | 1888.42 | 123.8 | 3.51 | 0.22  | 0.0214 | 0.0234 | 22.86 | 1.675 | -4.755 | 3.1359 | -0.00604 | -0.01342 | -0.04452 | -0.00193 | -0.00428 | -0.01420 | -0.00013 | -0.00019 | -0.00022 |
| 9797  | 1885.97 | 124.1 | 3.50 | 0.22  | 0.0190 | 0.0315 | 22.99 | 1.675 | -4.627 | 3.1305 | -0.00631 | -0.01099 | -0.04368 | -0.00201 | -0.00351 | -0.01395 | -0.00022 | 0.00057  | 0.00003  |
| 9798  | 1888.99 | 123.8 | 3.51 | 0.23  | 0.0190 | 0.0351 | 23.11 | 1.675 | -4.505 | 3.1361 | -0.00467 | -0.01115 | -0.04385 | -0.00149 | -0.00356 | -0.01398 | 0.00030  | 0.00053  | 0.00000  |
| 9799  | 1886.69 | 123.9 | 3.51 | 0.23  | 0.0235 | 0.0292 | 23.24 | 1.676 | -4.392 | 3.1324 | -0.00509 | -0.01200 | -0.04392 | -0.00163 | -0.00383 | -0.01402 | 0.00017  | 0.00025  | -0.00004 |
| 9800  | 1888.42 | 123.6 | 3.51 | 0.22  | 0.0217 | 0.0273 | 23.36 | 1.675 | -4.257 | 3.1353 | -0.00523 | -0.01188 | -0.04371 | -0.00167 | -0.00379 | -0.01394 | 0.00012  | 0.00029  | 0.00004  |
| 9801  | 1886.40 | 123.9 | 3.51 | 0.22  | 0.0180 | 0.0309 | 23.49 | 1.675 | -4.120 | 3.1322 | -0.00595 | -0.01298 | -0.04381 | -0.00190 | -0.00414 | -0.01399 | -0.00010 | -0.00006 | -0.00001 |
| 9802  | 1888.56 | 123.9 | 3.51 | 0.23  | 0.0180 | 0.0290 | 23.61 | 1.675 | -4.005 | 3.1351 | -0.00618 | -0.01202 | -0.04306 | -0.00197 | -0.00383 | -0.01374 | -0.00018 | 0.00025  | 0.00025  |
| 9803  | 1886.40 | 124.2 | 3.50 | 0.21  | 0.0156 | 0.0305 | 23.74 | 1.674 | -3.863 | 3.1310 | -0.00543 | -0.01327 | -0.04280 | -0.00173 | -0.00424 | -0.01367 | 0.00006  | -0.00015 | 0.00031  |
| 9804  | 1888.70 | 123.8 | 3.51 | 0.22  | 0.0183 | 0.0273 | 23.87 | 1.675 | -3.753 | 3.1363 | -0.00576 | -0.01288 | -0.04469 | -0.00184 | -0.00411 | -0.01425 | -0.00004 | -0.00002 | -0.00027 |
| 9805  | 1886.98 | 124.1 | 3.51 | 0.21  | 0.0121 | 0.0342 | 23.99 | 1.674 | -3.612 | 3.1316 | -0.00536 | -0.01061 | -0.04338 | -0.00171 | -0.00339 | -0.01385 | 0.00008  | 0.00070  | 0.00013  |
| 9806  | 1889.14 | 124.1 | 3.51 | 0.24  | 0.0228 | 0.0223 | 24.11 | 1.676 | -3.517 | 3.1358 | -0.00582 | -0.01076 | -0.04323 | -0.00186 | -0.00343 | -0.01379 | -0.00006 | 0.00065  | 0.00019  |
| 9807  | 1887.70 | 124.6 | 3.50 | 0.23  | 0.0190 | 0.0277 | 24.24 | 1.675 | -3.383 | 3.1332 | -0.00673 | -0.01090 | -0.04354 | -0.00215 | -0.00348 | -0.01390 | -0.00035 | 0.00060  | 0.00009  |
| 9808  | 1889.28 | 124.2 | 3.51 | 0.24  | 0.0190 | 0.0249 | 24.36 | 1.676 | -3.263 | 3.1363 | -0.00530 | -0.01186 | -0.04319 | -0.00169 | -0.00378 | -0.01377 | 0.00010  | 0.00030  | 0.00021  |
| 9809  | 1888.70 | 124.4 | 3.51 | 0.23  | 0.0200 | 0.0273 | 24.49 | 1.676 | -3.136 | 3.1343 | -0.00506 | -0.01026 | -0.04194 | -0.00161 | -0.00327 | -0.01338 | 0.00018  | 0.00081  | 0.00060  |
| 9810  | 1888.13 | 124.2 | 3.51 | 0.24  | 0.0214 | 0.0216 | 24.61 | 1.676 | -3.017 | 3.1353 | -0.00519 | -0.00858 | -0.04395 | -0.00165 | -0.00274 | -0.01402 | 0.00014  | 0.00135  | -0.00004 |
| 9811  | 1888.42 | 124.1 | 3.51 | 0.23  | 0.0169 | 0.0284 | 24.74 | 1.675 | -2.883 | 3.1347 | -0.00314 | -0.00830 | -0.04235 | -0.00100 | -0.00265 | -0.01351 | 0.00079  | 0.00143  | 0.00047  |
| 9812  | 1886.98 | 124.1 | 3.51 | 0.22  | 0.0166 | 0.0283 | 24.86 | 1.675 | -2.751 | 3.1339 | -0.00255 | -0.00995 | -0.04415 | -0.00081 | -0.00317 | -0.01409 | 0.00098  | 0.00091  | -0.00011 |
| 9813  | 1889.14 | 123.8 | 3.51 | 0.23  | 0.0166 | 0.0273 | 24.99 | 1.675 | -2.626 | 3.1356 | -0.00236 | -0.01053 | -0.04308 | -0.00075 | -0.00336 | -0.01374 | 0.00104  | 0.00073  | 0.00024  |
| 9814  | 1887.70 | 123.8 | 3.51 | 0.24  | 0.0173 | 0.0277 | 25.11 | 1.676 | -2.512 | 3.1349 | -0.00460 | -0.01342 | -0.04392 | -0.00147 | -0.00428 | -0.01401 | 0.00033  | -0.00020 | -0.00003 |
| 9815  | 1888.70 | 123.8 | 3.51 | 0.23  | 0.0173 | 0.0323 | 25.24 | 1.675 | -2.378 | 3.1355 | -0.00561 | -0.01439 | -0.04232 | -0.00179 | -0.00459 | -0.01350 | 0.00000  | -0.00051 | 0.00048  |
| 9816  | 1888.13 | 124.0 | 3.51 | 0.23  | 0.0204 | 0.0266 | 25.36 | 1.675 | -2.259 | 3.1356 | -0.00792 | -0.01222 | -0.04352 | -0.00253 | -0.00390 | -0.01388 | -0.00073 | 0.00019  | 0.00010  |
| 9817  | 1888.27 | 123.9 | 3.51 | 0.23  | 0.0183 | 0.0292 | 25.49 | 1.675 | -2.134 | 3.1341 | -0.00620 | -0.01058 | -0.04256 | -0.00198 | -0.00338 | -0.01358 | -0.00018 | 0.00071  | 0.00040  |
| 9818  | 1888.42 | 123.9 | 3.51 | 0.23  | 0.0200 | 0.0236 | 25.62 | 1.676 | -2.012 | 3.1348 | -0.00590 | -0.00660 | -0.04060 | -0.00188 | -0.00211 | -0.01295 | -0.00009 | 0.00198  | 0.00103  |
| 9819  | 1888.42 | 123.8 | 3.51 | 0.23  | 0.0183 | 0.0292 | 25.74 | 1.676 | -1.884 | 3.1360 | -0.00110 | -0.00371 | -0.04176 | -0.00035 | -0.00118 | -0.01331 | 0.00144  | 0.00290  | 0.00067  |
| 9820  | 1888.70 | 123.8 | 3.51 | 0.24  | 0.0180 | 0.0243 | 25.86 | 1.676 | -1.762 | 3.1359 | 0.00033  | -0.00361 | -0.04064 | 0.00011  | -0.00115 | -0.01296 | 0.00190  | 0.00293  | 0.00102  |
| 9821  | 1888.13 | 123.9 | 3.51 | 0.24  | 0.0197 | 0.0281 | 25.99 | 1.676 | -1.645 | 3.1349 | 0.00064  | -0.00688 | -0.04303 | 0.00020  | -0.00220 | -0.01373 | 0.00200  | 0.00189  | 0.00025  |
| 9822  | 1889.14 | 123.9 | 3.51 | 0.25  | 0.0224 | 0.0231 | 26.11 | 1.676 | -1.526 | 3.1360 | 0.00108  | -0.00857 | -0.04165 | 0.00034  | -0.00273 | -0.01328 | 0.00214  | 0.00135  | 0.00070  |
| 9823  | 1887.70 | 124.0 | 3.51 | 0.24  | 0.0190 | 0.0258 | 26.24 | 1.676 | -1.395 | 3.1334 | -0.00167 | -0.01257 | -0.04431 | -0.00053 | -0.00401 | -0.01414 | 0.00126  | 0.00007  | -0.00016 |
| 9824  | 1887.84 | 124.0 | 3.51 | 0.24  | 0.0169 | 0.0331 | 26.36 | 1.676 | -1.261 | 3.1350 | -0.00571 | -0.01553 | -0.04513 | -0.00182 | -0.00495 | -0.01440 | -0.00003 | -0.00087 | -0.00041 |
| 9825  | 1888.42 | 124.1 | 3.51 | 0.25  | 0.0193 | 0.0297 | 26.49 | 1.676 | -1.148 | 3.1352 | -0.00756 | -0.01505 | -0.04334 | -0.00241 | -0.00480 | -0.01383 | -0.00062 | -0.00071 | 0.00016  |
| 9826  | 1886.26 | 124.3 | 3.50 | 0.24  | 0.0187 | 0.0247 | 26.62 | 1.676 | -1.015 | 3.1322 | -0.00892 | -0.01148 | -0.04117 | -0.00285 | -0.00366 | -0.01314 | -0.00105 | 0.00042  | 0.00084  |
| 9827  | 1888.27 | 123.9 | 3.51 | 0.25  | 0.0207 | 0.0268 | 26.74 | 1.676 | -0.898 | 3.1351 | -0.00772 | -0.00677 | -0.03908 | -0.00246 | -0.00216 | -0.01247 | -0.00067 | 0.00192  | 0.00152  |
| 9828  | 1886.69 | 124.1 | 3.51 | 0.26  | 0.0207 | 0.0231 | 26.86 | 1.677 | -0.782 | 3.1318 | -0.00159 | -0.00002 | -0.03513 | -0.00051 | -0.00001 | -0.01122 | 0.00129  | 0.00408  | 0.00277  |
| 9829  | 1888.99 | 124.1 | 3.51 | 0.24  | 0.0217 | 0.0236 | 26.99 | 1.676 | -0.647 | 3.1368 | 0.00309  | -0.00104 | -0.03812 | 0.00099  | -0.00033 | -0.01215 | 0.00278  | 0.00375  | 0.00183  |
| 9830  | 1886.98 | 124.3 | 3.50 | 0.24  | 0.0221 | 0.0257 | 27.11 | 1.676 | -0.520 | 3.1324 | 0.00393  | -0.00116 | -0.03711 | 0.00125  | -0.00037 | -0.01185 | 0.00305  | 0.00371  | 0.00214  |
| 9831  | 1888.85 | 124.0 | 3.51 | 0.25  | 0.0207 | 0.0286 | 27.24 | 1.676 | -0.399 | 3.1354 | 0.00339  | -0.00580 | -0.04087 | 0.00108  | -0.00185 | -0.01303 | 0.00288  | 0.00223  | 0.00095  |
| 9832  | 1886.26 | 124.3 | 3.50 | 0.25  | 0.0238 | 0.0276 | 27.36 | 1.677 | -0.278 | 3.1325 | 0.00150  | -0.00971 | -0.04493 | 0.00048  | -0.00310 | -0.01434 | 0.00227  | 0.00098  | -0.00036 |
| 9833  | 1889.28 | 124.1 | 3.51 | 0.23  | 0.0190 | 0.0286 | 27.49 | 1.675 | -0.131 | 3.1362 | -0.00294 | -0.01193 | -0.04496 | -0.00094 | -0.00381 | -0.01434 | 0.00086  | 0.00028  | -0.00035 |
| 9834  | 1887.41 | 124.2 | 3.51 | 0.25  | 0.0207 | 0.0324 | 27.61 | 1.676 | -0.025 | 3.1331 | -0.00527 | -0.01307 | -0.04567 | -0.00168 | -0.00417 | -0.01458 | 0.00011  | -0.00009 | -0.00060 |
| 9835  | 1888.56 | 124.1 | 3.51 | 0.24  | 0.0176 | 0.0316 | 27.74 | 1.676 | 0.107  | 3.1356 | -0.00929 | -0.01098 | -0.04255 | -0.00296 | -0.00350 | -0.01357 | -0.00117 | 0.00058  | 0.00041  |
| 9836  | 1887.41 | 124.2 | 3.51 | 0.25  | 0.0228 | 0.0289 | 27.86 | 1.676 | 0.224  | 3.1325 | -0.00908 | -0.00662 | -0.03850 | -0.00290 | -0.00211 | -0.01229 | -0.00111 | 0.00197  | 0.00169  |
| 9837  | 1887.41 | 124.2 | 3.51 | 0.25  | 0.0211 | 0.0270 | 27.99 | 1.676 | 0.352  | 3.1335 | -0.00418 |          |          |          |          |          |          |          |          |

Table A15. Continued.

Run = 148

M = 1.60

xsppos = 40.351

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c  |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|---------|
| 9857  | 1887.84 | 124.2 | 3.51 | 0.24  | 0.0252 | 0.0246 | 30.49 | 1.676 | 2.855  | 3.1347 | 0.00278  | -0.00246 | -0.03351 | 0.00089  | -0.00079 | -0.01069 | 0.00268  | 0.00330  | 0.00329 |
| 9858  | 1887.70 | 124.2 | 3.51 | 0.24  | 0.0252 | 0.0246 | 30.61 | 1.676 | 2.979  | 3.1350 | 0.00419  | -0.00089 | -0.03137 | 0.00134  | -0.00029 | -0.01001 | 0.00313  | 0.00380  | 0.00397 |
| 9859  | 1888.27 | 124.0 | 3.51 | 0.24  | 0.0265 | 0.0244 | 30.74 | 1.676 | 3.103  | 3.1347 | 0.00300  | -0.00151 | -0.03258 | 0.00096  | -0.00048 | -0.01039 | 0.00275  | 0.00360  | 0.00359 |
| 9860  | 1886.11 | 124.3 | 3.50 | 0.24  | 0.0273 | 0.0201 | 30.86 | 1.676 | 3.228  | 3.1313 | 0.00311  | -0.00047 | -0.03277 | 0.00099  | -0.00015 | -0.01046 | 0.00279  | 0.00393  | 0.00352 |
| 9861  | 1888.70 | 123.8 | 3.51 | 0.23  | 0.0224 | 0.0286 | 30.99 | 1.676 | 3.359  | 3.1360 | 0.00206  | -0.00101 | -0.03480 | 0.00066  | -0.00032 | -0.01110 | 0.00245  | 0.00376  | 0.00288 |
| 9862  | 1886.40 | 124.2 | 3.50 | 0.23  | 0.0228 | 0.0279 | 31.12 | 1.675 | 3.492  | 3.1320 | 0.00323  | -0.00006 | -0.03421 | 0.00103  | -0.00002 | -0.01092 | 0.00283  | 0.00407  | 0.00306 |
| 9863  | 1888.85 | 124.0 | 3.51 | 0.23  | 0.0217 | 0.0320 | 31.24 | 1.676 | 3.617  | 3.1352 | 0.00446  | 0.00224  | -0.03353 | 0.00142  | 0.00071  | -0.01069 | 0.00322  | 0.00480  | 0.00329 |
| 9864  | 1886.54 | 124.3 | 3.50 | 0.20  | 0.0176 | 0.0372 | 31.37 | 1.674 | 3.766  | 3.1321 | 0.00395  | 0.00170  | -0.03487 | 0.00126  | 0.00054  | -0.01113 | 0.00306  | 0.00463  | 0.00285 |
| 9865  | 1889.28 | 123.9 | 3.51 | 0.23  | 0.0241 | 0.0296 | 31.49 | 1.676 | 3.860  | 3.1373 | 0.00601  | 0.00057  | -0.03323 | 0.00192  | 0.00018  | -0.01059 | 0.00371  | 0.00427  | 0.00339 |
| 9866  | 1886.40 | 124.1 | 3.50 | 0.22  | 0.0221 | 0.0285 | 31.62 | 1.675 | 3.995  | 3.1319 | 0.00726  | -0.00159 | -0.03334 | 0.00232  | 0.00051  | -0.01064 | 0.00411  | 0.00459  | 0.00334 |
| 9867  | 1889.14 | 123.8 | 3.51 | 0.23  | 0.0217 | 0.0301 | 31.74 | 1.676 | 4.112  | 3.1364 | 0.00543  | 0.00200  | -0.03298 | 0.00173  | 0.00064  | -0.01052 | 0.00352  | 0.00472  | 0.00347 |
| 9868  | 1888.13 | 123.8 | 3.51 | 0.23  | 0.0235 | 0.0283 | 31.86 | 1.676 | 4.240  | 3.1345 | 0.00601  | 0.00073  | -0.03329 | 0.00192  | 0.00023  | -0.01062 | 0.00371  | 0.00432  | 0.00336 |
| 9869  | 1887.41 | 123.9 | 3.51 | 0.22  | 0.0211 | 0.0288 | 31.99 | 1.675 | 4.376  | 3.1343 | 0.00574  | -0.00090 | -0.03325 | 0.00183  | -0.00029 | -0.01061 | 0.00363  | 0.00380  | 0.00337 |
| 9870  | 1888.27 | 123.9 | 3.51 | 0.20  | 0.0207 | 0.0277 | 32.11 | 1.674 | 4.515  | 3.1348 | 0.00359  | -0.00054 | -0.03252 | 0.00114  | -0.00017 | -0.01037 | 0.00294  | 0.00391  | 0.00361 |
| 9871  | 1887.84 | 124.0 | 3.51 | 0.23  | 0.0248 | 0.0207 | 32.24 | 1.676 | 4.613  | 3.1351 | 0.00593  | 0.00034  | -0.03225 | 0.00189  | 0.00011  | -0.01029 | 0.00369  | 0.00419  | 0.00369 |
| 9872  | 1888.56 | 124.0 | 3.51 | 0.23  | 0.0228 | 0.0251 | 32.36 | 1.675 | 4.742  | 3.1360 | 0.00350  | 0.00350  | -0.03238 | 0.00111  | 0.00112  | -0.01032 | 0.00291  | 0.00520  | 0.00366 |
| 9873  | 1886.40 | 124.2 | 3.50 | 0.25  | 0.0187 | 0.0303 | 32.49 | 1.676 | 4.855  | 3.1322 | 0.00726  | 0.00561  | -0.03059 | 0.00232  | 0.00179  | -0.00977 | 0.00411  | 0.00588  | 0.00422 |
| 9874  | 1888.56 | 124.0 | 3.51 | 0.24  | 0.0186 | 0.0312 | 32.62 | 1.676 | 4.986  | 3.1361 | 0.00876  | 0.00482  | -0.03100 | 0.00279  | 0.00154  | -0.00989 | 0.00459  | 0.00562  | 0.00410 |
| 9875  | 1886.26 | 124.2 | 3.50 | 0.26  | 0.0207 | 0.0296 | 32.74 | 1.677 | 5.094  | 3.1331 | 0.00960  | 0.00623  | -0.03224 | 0.00307  | 0.00199  | -0.01029 | 0.00486  | 0.00607  | 0.00369 |
| 9876  | 1888.70 | 124.1 | 3.51 | 0.23  | 0.0204 | 0.0322 | 32.86 | 1.676 | 5.236  | 3.1348 | 0.01057  | 0.00787  | -0.03002 | 0.00337  | 0.00251  | -0.00958 | 0.00517  | 0.00659  | 0.00441 |
| 9877  | 1886.40 | 124.3 | 3.50 | 0.25  | 0.0183 | 0.0367 | 32.99 | 1.676 | 5.350  | 3.1334 | 0.01018  | 0.00326  | -0.03235 | 0.00325  | 0.00104  | -0.01032 | 0.00504  | 0.00513  | 0.00366 |
| 9878  | 1888.42 | 124.1 | 3.51 | 0.24  | 0.0166 | 0.0403 | 33.11 | 1.676 | 5.490  | 3.1358 | 0.00808  | 0.00307  | -0.03119 | 0.00258  | 0.00098  | -0.00995 | 0.00437  | 0.00506  | 0.00403 |
| 9879  | 1885.54 | 124.3 | 3.50 | 0.22  | 0.0176 | 0.0335 | 33.24 | 1.675 | 5.623  | 3.1315 | 0.00554  | 0.00339  | -0.03266 | 0.00177  | 0.00108  | -0.01043 | 0.00356  | 0.00517  | 0.00355 |
| 9880  | 1889.28 | 123.9 | 3.51 | 0.22  | 0.0152 | 0.0349 | 33.37 | 1.675 | 5.752  | 3.1376 | 0.00665  | 0.00215  | -0.03026 | 0.00212  | 0.00069  | -0.00964 | 0.00391  | 0.00477  | 0.00434 |
| 9881  | 1887.12 | 124.2 | 3.51 | 0.23  | 0.0183 | 0.0292 | 33.49 | 1.676 | 5.865  | 3.1332 | 0.00506  | 0.00003  | -0.02914 | 0.00161  | 0.00001  | -0.00930 | 0.00341  | 0.00409  | 0.00468 |
| 9882  | 1889.71 | 123.9 | 3.51 | 0.21  | 0.0166 | 0.0310 | 33.61 | 1.675 | 6.005  | 3.1376 | 0.00726  | 0.00210  | -0.02616 | 0.00231  | 0.00067  | -0.00834 | 0.00411  | 0.00475  | 0.00565 |
| 9883  | 1887.12 | 124.1 | 3.51 | 0.23  | 0.0169 | 0.0312 | 33.74 | 1.675 | 6.117  | 3.1337 | 0.00653  | 0.00224  | -0.02649 | 0.00208  | 0.00072  | -0.00845 | 0.00388  | 0.00480  | 0.00553 |
| 9884  | 1888.70 | 123.6 | 3.51 | 0.22  | 0.0162 | 0.0318 | 33.87 | 1.675 | 6.252  | 3.1358 | 0.00735  | 0.00683  | -0.02670 | 0.00234  | 0.00218  | -0.00851 | 0.00414  | 0.00626  | 0.00547 |
| 9885  | 1887.12 | 124.1 | 3.51 | 0.24  | 0.0193 | 0.0326 | 33.99 | 1.676 | 6.358  | 3.1326 | 0.01129  | 0.00649  | -0.02717 | 0.00360  | 0.00207  | -0.00867 | 0.00540  | 0.00615  | 0.00531 |
| 9886  | 1889.14 | 123.9 | 3.51 | 0.23  | 0.0183 | 0.0301 | 34.11 | 1.676 | 6.489  | 3.1367 | 0.01020  | 0.00849  | -0.02915 | 0.00325  | 0.00271  | -0.00929 | 0.00505  | 0.00679  | 0.00469 |
| 9887  | 1887.55 | 124.4 | 3.50 | 0.23  | 0.0162 | 0.0355 | 34.24 | 1.675 | 6.618  | 3.1340 | 0.01166  | 0.00736  | -0.02808 | 0.00372  | 0.00235  | -0.00896 | 0.00552  | 0.00643  | 0.00502 |
| 9888  | 1889.28 | 124.0 | 3.51 | 0.23  | 0.0173 | 0.0342 | 34.36 | 1.675 | 6.744  | 3.1382 | 0.01138  | 0.00746  | -0.03029 | 0.00363  | 0.00238  | -0.00965 | 0.00542  | 0.00646  | 0.00433 |
| 9889  | 1888.27 | 124.1 | 3.51 | 0.23  | 0.0193 | 0.0325 | 34.49 | 1.676 | 6.862  | 3.1349 | 0.01304  | 0.00881  | -0.02985 | 0.00416  | 0.00281  | -0.00952 | 0.00595  | 0.00689  | 0.00446 |
| 9890  | 1888.42 | 124.2 | 3.51 | 0.23  | 0.0173 | 0.0370 | 34.61 | 1.675 | 6.993  | 3.1370 | 0.01328  | 0.00851  | -0.03098 | 0.00423  | 0.00271  | -0.00987 | 0.00603  | 0.00680  | 0.00411 |
| 9891  | 1888.42 | 124.3 | 3.51 | 0.22  | 0.0159 | 0.0418 | 34.74 | 1.675 | 7.133  | 3.1355 | 0.01312  | 0.00924  | -0.02888 | 0.00418  | 0.00295  | -0.00921 | 0.00598  | 0.00703  | 0.00477 |
| 9892  | 1886.40 | 124.3 | 3.50 | 0.23  | 0.0190 | 0.0380 | 34.86 | 1.675 | 7.246  | 3.1336 | 0.01261  | 0.01017  | -0.02791 | 0.00402  | 0.00325  | -0.00891 | 0.00582  | 0.00733  | 0.00508 |
| 9893  | 1888.70 | 124.2 | 3.51 | 0.23  | 0.0197 | 0.0383 | 34.99 | 1.676 | 7.364  | 3.1359 | 0.01308  | 0.01020  | -0.02585 | 0.00417  | 0.00325  | -0.00824 | 0.00596  | 0.00734  | 0.00574 |
| 9894  | 1887.55 | 124.2 | 3.51 | 0.23  | 0.0190 | 0.0370 | 35.11 | 1.675 | 7.492  | 3.1353 | 0.01375  | 0.01040  | -0.02518 | 0.00439  | 0.00332  | -0.00803 | 0.00618  | 0.00740  | 0.00595 |
| 9895  | 1888.56 | 123.8 | 3.51 | 0.23  | 0.0166 | 0.0422 | 35.24 | 1.675 | 7.615  | 3.1352 | 0.01395  | 0.00970  | -0.02574 | 0.00445  | 0.00309  | -0.00821 | 0.00624  | 0.00718  | 0.00577 |
| 9896  | 1887.98 | 124.1 | 3.51 | 0.24  | 0.0186 | 0.0359 | 35.36 | 1.676 | 7.736  | 3.1356 | 0.01441  | 0.00734  | -0.02508 | 0.00460  | 0.00234  | -0.00800 | 0.00639  | 0.00643  | 0.00598 |
| 9897  | 1888.85 | 124.1 | 3.51 | 0.24  | 0.0217 | 0.0339 | 35.49 | 1.676 | 7.861  | 3.1359 | 0.01272  | 0.00509  | -0.02406 | 0.00406  | 0.00162  | -0.00767 | 0.00585  | 0.00571  | 0.00631 |
| 9898  | 1887.41 | 124.1 | 3.51 | 0.24  | 0.0204 | 0.0387 | 35.61 | 1.676 | 7.979  | 3.1351 | 0.01044  | 0.00280  | -0.02386 | 0.00333  | 0.00089  | -0.00761 | 0.00512  | 0.00498  | 0.00637 |
| 9899  | 1888.56 | 124.1 | 3.51 | 0.22  | 0.0166 | 0.0422 | 35.74 | 1.675 | 8.123  | 3.1357 | 0.00822  | -0.00022 | -0.02378 | 0.00262  | -0.00007 | -0.00758 | 0.00441  | 0.00402  | 0.00640 |
| 9900  | 1887.12 | 124.2 | 3.50 | 0.22  | 0.0162 | 0.0383 | 35.86 | 1.675 | 8.252  | 3.1342 | 0.00416  | -0.00402 | -0.02394 | 0.00133  | -0.00128 | -0.00764 | 0.00312  | 0.00280  | 0.00634 |
| 9901  | 1888.13 | 124.0 | 3.51 | 0.24  | 0.0193 | 0.0381 | 35.99 | 1.676 | 8.361  | 3.1335 | 0.00283  | -0.00199 | -0.02153 | 0.00090  | -0.00063 | -0.00687 | 0.00270  | 0.00345  | 0.00711 |
| 9902  | 1887.26 | 124.1 | 3.51 | 0.24  | 0.0214 | 0.0384 | 36.11 | 1.676 | 8.480  | 3.1349 | 0.00217  | -0.00563 | -0.02178 | 0.00069  | -0.00180 | -0.00695 | 0.00249  | 0.00229  | 0.00704 |
| 9903  | 1888.56 | 124.0 | 3.51 | 0.24  | 0.0221 | 0.0359 | 36.24 | 1.676 | 8.607  | 3.1355 | -0.00028 | -0.00592 | -0.02120 | -0.00009 | -0.00189 | -0.00676 | 0.00170  | 0.00220  | 0.00722 |
| 9904  | 1887.70 | 124.0 | 3.51 | 0.23  | 0.0183 | 0.0413 | 36.36 | 1.675 | 8.742  | 3.1354 | -0.00370 | -0.01298 | -0.02656 | -0.00118 | -0.00414 | -0.00847 | 0.00061  | -0.00005 | 0.00551 |
| 9905  | 1887.98 | 124.0 | 3.51 | 0.25  | 0.0221 | 0.0369 | 36.49 | 1.676 | 8.848  | 3.1340 | -0.00445 | -0.01196 | -0.02369 | -0.00142 | -0.00382 | -0.00756 | 0.00037  | 0.00027  | 0.00642 |
| 9906  | 1887.41 | 124.1 | 3.51 | 0.23  | 0.0228 | 0.0363 | 36.61 | 1.676 | 8.984  | 3.1356 | -0.00889 | -0.01904 | -0.02830 | -0.00284 | -0.00607 | -0.00903 | -0.00104 | -0.00199 | 0.00496 |
| 9907  | 1888.70 | 123.9 | 3.51 | 0.24  | 0.0197 | 0.0392 | 36.74 | 1.676 | 9.106  | 3.1355 | -0.01151 | -0.02348 | -0.03021 | -0.00367 | -0.00749 | -0.00963 | -0.00188 | -0.00340 | 0.00435 |
| 9908  | 1888.70 | 123.9 | 3.51 | 0.24  | 0.0231 | 0.0327 | 36.86 | 1.676 | 9.228  | 3.1358 | -0.01688 | -0.02803 | -0.03214 | -0.00538 | -0.00894 | -0.01025 | -0.00359 | -0.00486 | 0.00373 |
| 9909  | 1888.13 | 124.1 | 3.51 | 0.24  | 0.0221 | 0.0378 | 36.99 | 1.676 | 9.360  | 3.1360 | -0.02042 | -0.03502 | -0.03543 | -0.00651 | -0.01117 | -0.01130 | -0.00472 | -0.00708 | 0.00269 |
| 9910  | 1889.28 | 124.0 | 3.51 | 0.23  | 0.0190 | 0.0379 | 37.12 | 1.675 | 9.492  | 3.1366 | -0.02374 | -        |          |          |          |          |          |          |         |

Table A15. Concluded.

Run = 148

M = 1.60

xsppos = 40.351

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 9930  | 1888.56 | 124.1 | 3.51 | 0.22  | 0.0193 | 0.0363 | 39.61 | 1.675 | 11.995 | 3.1366 | -0.01381 | -0.01885 | -0.06290 | -0.00440 | -0.00601 | -0.02005 | -0.00261 | -0.00192 | -0.00607 |
| 9931  | 1888.42 | 124.0 | 3.51 | 0.25  | 0.0258 | 0.0333 | 39.74 | 1.677 | 12.099 | 3.1356 | -0.01304 | -0.01910 | -0.06527 | -0.00416 | -0.00609 | -0.02082 | -0.00236 | -0.00201 | -0.00683 |
| 9932  | 1888.85 | 124.0 | 3.51 | 0.23  | 0.0217 | 0.0385 | 39.86 | 1.676 | 12.240 | 3.1372 | -0.01102 | -0.01545 | -0.05765 | -0.00351 | -0.00493 | -0.01838 | -0.00172 | -0.00084 | -0.00439 |
| 9933  | 1888.27 | 124.1 | 3.51 | 0.23  | 0.0210 | 0.0354 | 39.99 | 1.675 | 12.367 | 3.1348 | -0.01094 | -0.01276 | -0.05303 | -0.00349 | -0.00407 | -0.01692 | -0.00169 | 0.00001  | -0.00293 |
| 9934  | 1889.28 | 124.0 | 3.51 | 0.24  | 0.0176 | 0.0390 | 40.11 | 1.676 | 12.488 | 3.1376 | -0.00927 | -0.01252 | -0.05065 | -0.00295 | -0.00399 | -0.01614 | -0.00116 | 0.00009  | -0.00216 |
| 9935  | 1887.41 | 124.5 | 3.50 | 0.23  | 0.0207 | 0.0352 | 40.24 | 1.675 | 12.616 | 3.1331 | -0.00692 | -0.01402 | -0.04860 | -0.00221 | -0.00448 | -0.01551 | -0.00041 | -0.00039 | -0.00153 |
| 9936  | 1887.98 | 124.2 | 3.51 | 0.25  | 0.0238 | 0.0294 | 40.37 | 1.677 | 12.725 | 3.1353 | -0.00620 | -0.01527 | -0.05048 | -0.00198 | -0.00487 | -0.01610 | -0.00018 | -0.00078 | -0.00212 |
| 9937  | 1888.85 | 124.2 | 3.51 | 0.25  | 0.0238 | 0.0294 | 40.49 | 1.677 | 12.847 | 3.1369 | -0.00856 | -0.01824 | -0.05117 | -0.00273 | -0.00582 | -0.01631 | -0.00094 | -0.00173 | -0.00233 |
| 9938  | 1888.99 | 123.9 | 3.51 | 0.24  | 0.0204 | 0.0322 | 40.61 | 1.676 | 12.980 | 3.1364 | -0.00929 | -0.01781 | -0.04813 | -0.00296 | -0.00568 | -0.01534 | -0.00117 | -0.00159 | -0.00136 |
| 9939  | 1888.27 | 123.8 | 3.51 | 0.25  | 0.0210 | 0.0335 | 40.74 | 1.677 | 13.098 | 3.1353 | -0.01105 | -0.01803 | -0.05054 | -0.00352 | -0.00575 | -0.01612 | -0.00173 | -0.00167 | -0.00214 |
| 9940  | 1888.13 | 124.0 | 3.51 | 0.25  | 0.0252 | 0.0283 | 40.87 | 1.677 | 13.218 | 3.1359 | -0.01047 | -0.02049 | -0.05113 | -0.00334 | -0.00653 | -0.01631 | -0.00155 | -0.00245 | -0.00232 |
| 9941  | 1888.85 | 124.0 | 3.51 | 0.24  | 0.0190 | 0.0389 | 40.99 | 1.676 | 13.355 | 3.1361 | -0.01252 | -0.02297 | -0.04983 | -0.00399 | -0.00732 | -0.01589 | -0.00220 | -0.00324 | -0.00191 |
| 9942  | 1887.12 | 124.1 | 3.51 | 0.25  | 0.0204 | 0.0331 | 41.11 | 1.676 | 13.478 | 3.1345 | -0.01543 | -0.02390 | -0.04800 | -0.00492 | -0.00762 | -0.01531 | -0.00313 | -0.00354 | -0.00133 |
| 9943  | 1888.70 | 123.9 | 3.51 | 0.25  | 0.0245 | 0.0261 | 41.24 | 1.677 | 13.593 | 3.1360 | -0.01568 | -0.02329 | -0.04865 | -0.00500 | -0.00743 | -0.01551 | -0.00321 | -0.00334 | -0.00153 |
| 9944  | 1886.83 | 123.9 | 3.51 | 0.25  | 0.0187 | 0.0331 | 41.37 | 1.676 | 13.731 | 3.1336 | -0.01619 | -0.02089 | -0.04867 | -0.00517 | -0.00667 | -0.01553 | -0.00337 | -0.00258 | -0.00155 |
| 9945  | 1888.99 | 124.0 | 3.51 | 0.26  | 0.0231 | 0.0262 | 41.49 | 1.677 | 13.841 | 3.1369 | -0.01441 | -0.01928 | -0.04811 | -0.00460 | -0.00615 | -0.01534 | -0.00280 | -0.00206 | -0.00136 |
| 9946  | 1887.84 | 124.1 | 3.51 | 0.25  | 0.0176 | 0.0344 | 41.61 | 1.676 | 13.978 | 3.1356 | -0.01118 | -0.01519 | -0.04786 | -0.00357 | -0.00484 | -0.01526 | -0.00177 | -0.00076 | -0.00128 |
| 9947  | 1888.13 | 124.3 | 3.51 | 0.25  | 0.0193 | 0.0288 | 41.74 | 1.677 | 14.096 | 3.1347 | -0.00503 | -0.01210 | -0.04834 | -0.00160 | -0.00386 | -0.01542 | 0.00019  | 0.00022  | -0.00144 |
| 9948  | 1888.56 | 124.1 | 3.51 | 0.26  | 0.0224 | 0.0259 | 41.87 | 1.677 | 14.221 | 3.1353 | -0.00604 | -0.01237 | -0.04861 | -0.00193 | -0.00395 | -0.01550 | -0.00013 | 0.00014  | -0.00152 |
| 9949  | 1888.27 | 124.1 | 3.51 | 0.24  | 0.0200 | 0.0348 | 41.99 | 1.676 | 14.354 | 3.1349 | -0.00612 | -0.01473 | -0.05089 | -0.00195 | -0.00470 | -0.01623 | -0.00016 | -0.00061 | -0.00225 |
| 9950  | 1888.42 | 123.9 | 3.51 | 0.25  | 0.0210 | 0.0326 | 42.12 | 1.677 | 14.477 | 3.1357 | -0.00950 | -0.01913 | -0.05288 | -0.00303 | -0.00610 | -0.01686 | -0.00124 | -0.00202 | -0.00288 |
| 9951  | 1888.13 | 124.1 | 3.51 | 0.26  | 0.0210 | 0.0354 | 42.24 | 1.677 | 14.594 | 3.1357 | -0.01142 | -0.02078 | -0.05490 | -0.00364 | -0.00663 | -0.01751 | -0.00185 | -0.00254 | -0.00353 |
| 9952  | 1888.27 | 124.1 | 3.51 | 0.24  | 0.0210 | 0.0316 | 42.36 | 1.676 | 14.732 | 3.1359 | -0.01286 | -0.02090 | -0.05163 | -0.00410 | -0.00666 | -0.01646 | -0.00231 | -0.00258 | -0.00248 |
| 9953  | 1888.27 | 124.2 | 3.51 | 0.25  | 0.0241 | 0.0296 | 42.49 | 1.677 | 14.844 | 3.1345 | -0.01523 | -0.01730 | -0.04907 | -0.00486 | -0.00552 | -0.01566 | -0.00306 | -0.00144 | -0.00167 |
| 9954  | 1889.14 | 123.9 | 3.51 | 0.23  | 0.0207 | 0.0305 | 42.61 | 1.676 | 14.989 | 3.1370 | -0.01117 | -0.01332 | -0.04689 | -0.00356 | -0.00425 | -0.01495 | -0.00177 | -0.00016 | -0.00097 |
| 9955  | 1887.70 | 124.1 | 3.51 | 0.24  | 0.0207 | 0.0305 | 42.74 | 1.676 | 15.109 | 3.1344 | -0.00674 | -0.01003 | -0.04457 | -0.00215 | -0.00320 | -0.01422 | -0.00036 | 0.00088  | -0.00024 |
| 9956  | 1888.70 | 123.9 | 3.51 | 0.24  | 0.0221 | 0.0266 | 42.87 | 1.676 | 15.233 | 3.1358 | -0.00280 | -0.00802 | -0.04322 | -0.00089 | -0.00256 | -0.01378 | 0.00090  | 0.00153  | 0.00020  |
| 9957  | 1888.13 | 124.0 | 3.51 | 0.22  | 0.0193 | 0.0344 | 42.99 | 1.675 | 15.376 | 3.1347 | -0.00250 | -0.00654 | -0.04453 | -0.00080 | -0.00209 | -0.01421 | 0.00100  | 0.00200  | -0.00022 |
| 9958  | 1889.14 | 124.0 | 3.51 | 0.24  | 0.0200 | 0.0329 | 43.11 | 1.676 | 15.485 | 3.1369 | -0.00332 | -0.00855 | -0.04852 | -0.00106 | -0.00273 | -0.01547 | 0.00074  | 0.00136  | -0.00149 |
| 9959  | 1887.26 | 124.2 | 3.51 | 0.24  | 0.0214 | 0.0309 | 43.24 | 1.676 | 15.606 | 3.1336 | -0.00347 | -0.00841 | -0.05083 | -0.00111 | -0.00268 | -0.01622 | 0.00069  | 0.00140  | -0.00224 |
| 9960  | 1888.85 | 123.9 | 3.51 | 0.23  | 0.0197 | 0.0309 | 43.36 | 1.675 | 15.741 | 3.1371 | -0.00431 | -0.01098 | -0.05236 | -0.00137 | -0.00350 | -0.01669 | 0.00042  | 0.00058  | -0.00271 |
| 9961  | 1887.70 | 124.0 | 3.51 | 0.23  | 0.0200 | 0.0311 | 43.49 | 1.675 | 15.870 | 3.1345 | -0.00294 | -0.01251 | -0.05073 | -0.00094 | -0.00399 | -0.01618 | 0.00086  | 0.00009  | -0.00220 |
| 9962  | 1889.28 | 123.9 | 3.51 | 0.24  | 0.0190 | 0.0333 | 43.61 | 1.676 | 15.984 | 3.1369 | -0.00411 | -0.01157 | -0.04455 | -0.00131 | -0.00369 | -0.01420 | 0.00049  | 0.00040  | -0.00022 |
| 9963  | 1887.84 | 124.3 | 3.51 | 0.25  | 0.0238 | 0.0276 | 43.74 | 1.677 | 16.097 | 3.1352 | -0.00493 | -0.01337 | -0.04487 | -0.00157 | -0.00427 | -0.01431 | 0.00022  | -0.00018 | -0.00033 |
| 9964  | 1888.99 | 124.1 | 3.51 | 0.23  | 0.0190 | 0.0323 | 43.86 | 1.675 | 16.242 | 3.1382 | -0.00584 | -0.01238 | -0.04156 | -0.00186 | -0.00395 | -0.01324 | -0.00007 | 0.00014  | 0.00074  |
| 9965  | 1888.27 | 124.1 | 3.51 | 0.24  | 0.0200 | 0.0339 | 43.99 | 1.676 | 16.355 | 3.1350 | -0.00505 | -0.01189 | -0.03984 | -0.00161 | -0.00379 | -0.01271 | 0.00018  | 0.00029  | 0.00127  |
| 9966  | 1889.28 | 123.9 | 3.51 | 0.24  | 0.0203 | 0.0322 | 44.11 | 1.676 | 16.480 | 3.1373 | -0.00504 | -0.01051 | -0.04124 | -0.00161 | -0.00335 | -0.01315 | 0.00019  | 0.00073  | 0.00084  |
| 9967  | 1887.41 | 124.1 | 3.51 | 0.23  | 0.0180 | 0.0383 | 44.24 | 1.675 | 16.623 | 3.1344 | -0.00595 | -0.01208 | -0.04024 | -0.00190 | -0.00386 | -0.01284 | -0.00010 | 0.00023  | 0.00114  |
| 9968  | 1889.14 | 123.9 | 3.51 | 0.23  | 0.0179 | 0.0411 | 44.37 | 1.675 | 16.745 | 3.1382 | -0.00487 | -0.01300 | -0.04173 | -0.00155 | -0.00414 | -0.01330 | 0.00024  | -0.00006 | 0.00068  |
| 9969  | 1886.69 | 124.4 | 3.50 | 0.22  | 0.0159 | 0.0391 | 44.49 | 1.675 | 16.878 | 3.1336 | -0.00524 | -0.01313 | -0.04302 | -0.00167 | -0.00419 | -0.01373 | 0.00012  | -0.00011 | 0.00025  |
| 9970  | 1888.85 | 124.1 | 3.51 | 0.23  | 0.0197 | 0.0337 | 44.61 | 1.676 | 16.988 | 3.1364 | -0.00698 | -0.01065 | -0.04175 | -0.00222 | -0.00339 | -0.01331 | -0.00043 | 0.00069  | 0.00067  |
| 9971  | 1888.56 | 124.1 | 3.51 | 0.24  | 0.0207 | 0.0324 | 44.74 | 1.676 | 17.110 | 3.1364 | -0.00540 | -0.01253 | -0.04297 | -0.00172 | -0.00399 | -0.01370 | 0.00007  | 0.00009  | 0.00028  |
| 9972  | 1888.85 | 123.9 | 3.51 | 0.24  | 0.0152 | 0.0387 | 44.87 | 1.676 | 17.239 | 3.1373 | -0.00500 | -0.01303 | -0.04381 | -0.00159 | -0.00415 | -0.01396 | 0.00020  | -0.00007 | 0.00002  |
| 9973  | 1887.70 | 124.4 | 3.50 | 0.23  | 0.0210 | 0.0344 | 44.99 | 1.675 | 17.368 | 3.1346 | -0.00567 | -0.01220 | -0.04379 | -0.00181 | -0.00389 | -0.01397 | -0.00002 | 0.00019  | 0.00001  |
| 9974  | 1888.13 | 124.3 | 3.51 | 0.23  | 0.0162 | 0.0402 | 45.11 | 1.675 | 17.492 | 3.1355 | -0.00504 | -0.00985 | -0.04275 | -0.00161 | -0.00314 | -0.01364 | 0.00019  | 0.00094  | 0.00035  |
| 9975  | 1888.27 | 124.3 | 3.51 | 0.23  | 0.0217 | 0.0348 | 45.24 | 1.675 | 17.616 | 3.1364 | -0.00597 | -0.01193 | -0.04372 | -0.00190 | -0.00380 | -0.01394 | -0.00011 | 0.00028  | 0.00004  |
| 9976  | 1887.70 | 124.2 | 3.51 | 0.24  | 0.0214 | 0.0328 | 45.36 | 1.676 | 17.732 | 3.1352 | -0.00533 | -0.01213 | -0.04324 | -0.00170 | -0.00387 | -0.01379 | 0.00009  | 0.00021  | 0.00019  |

Table A16. Run 149.

Run = 149

M = 1.60

xsppos = 42.345

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 9977  | 1888.85 | 124.0 | 3.51 | 0.22  | 0.0169 | 0.0415 | 21.36 | 1.675 | -6.258 | 3.1365 | -0.00871 | 0.03139 | -0.03573 | -0.00278 | 0.01001 | -0.01139 | -0.00012 | -0.00015 | -0.00016 |
| 9978  | 1885.68 | 124.3 | 3.50 | 0.23  | 0.0197 | 0.0356 | 21.48 | 1.675 | -6.139 | 3.1314 | -0.00916 | 0.03141 | -0.03562 | -0.00292 | 0.01003 | -0.01138 | -0.00027 | -0.00013 | -0.00014 |
| 9979  | 1888.99 | 124.2 | 3.51 | 0.24  | 0.0238 | 0.0247 | 21.61 | 1.676 | -6.028 | 3.1368 | -0.00828 | 0.03221 | -0.03542 | -0.00264 | 0.01027 | -0.01129 | 0.00001  | 0.00011  | -0.00006 |
| 9980  | 1885.54 | 124.5 | 3.50 | 0.23  | 0.0183 | 0.0292 | 21.73 | 1.675 | -5.888 | 3.1308 | -0.00761 | 0.03206 | -0.03483 | -0.00243 | 0.01024 | -0.01113 | 0.00022  | 0.00008  | 0.00011  |
| 9981  | 1889.86 | 124.0 | 3.51 | 0.23  | 0.0234 | 0.0190 | 21.86 | 1.676 | -5.771 | 3.1382 | -0.00784 | 0.03219 | -0.03450 | -0.00250 | 0.01026 | -0.01099 | 0.00015  | 0.00010  | 0.00024  |
| 9982  | 1886.40 | 124.4 | 3.50 | 0.22  | 0.0235 | 0.0209 | 21.98 | 1.675 | -5.638 | 3.1324 | -0.00864 | 0.03113 | -0.03624 | -0.00276 | 0.00994 | -0.01157 | -0.00010 | -0.00022 | -0.00033 |
| 9983  | 1889.71 | 124.0 | 3.51 | 0.20  | 0.0204 | 0.0210 | 22.11 | 1.674 | -5.493 | 3.1389 | -0.00983 | 0.03145 | -0.03601 | -0.00313 | 0.01002 | -0.01147 | -0.00048 | -0.00014 | -0.00024 |
| 9984  | 1886.54 | 124.5 | 3.50 | 0.22  | 0.0211 | 0.0214 | 22.23 | 1.675 | -5.385 | 3.1325 | -0.00875 | 0.03173 | -0.03486 | -0.00279 | 0.01013 | -0.01113 | -0.00014 | -0.00003 | 0.00011  |
| 9985  | 1889.28 | 124.1 | 3.51 | 0.22  | 0.0200 | 0.0199 | 22.36 | 1.675 | -5.263 | 3.1387 | -0.00890 | 0.03037 | -0.03613 | -0.00284 | 0.00968 | -0.01151 | -0.00018 | -0.00048 | -0.00027 |
| 9986  | 1887.26 | 124.1 | 3.51 | 0.21  | 0.0231 | 0.0197 | 22.48 | 1.675 | -5.127 | 3.1337 | -0.00881 | 0.03233 | -0.03455 | -0.00281 | 0.01032 | -0.01102 | -0.00016 | 0.00016  | 0.00021  |
| 9987  | 1889.86 | 123.9 | 3.51 | 0.22  | 0.0241 | 0.0212 | 22.61 | 1.675 | -5.014 | 3.1371 | -0.00876 | 0.03368 | -0.03477 | -0.00279 | 0.01074 | -0.01108 | -0.00014 | 0.00058  | 0.00015  |
| 9988  | 1886.83 | 124.4 | 3.50 | 0.22  | 0.0214 | 0.0281 | 22.73 | 1.675 | -4.887 | 3.1317 | -0.00753 | 0.03330 | -0.03555 | -0.00240 | 0.01063 | -0.01135 | 0.00025  | 0.00047  | -0.00012 |
| 9989  | 1889.14 | 123.9 | 3.51 | 0.21  | 0.0217 | 0.0264 | 22.86 | 1.674 | -4.749 | 3.1374 | -0.01018 | 0.03155 | -0.03526 | -0.00325 | 0.01006 | -0.01124 | -0.00059 | -0.00010 | 0.00000  |
| 9990  | 1887.12 | 124.0 | 3.51 | 0.20  | 0.0180 | 0.0327 | 22.98 | 1.674 | -4.612 | 3.1343 | -0.00899 | 0.03128 | -0.03661 | -0.00287 | 0.00998 | -0.01168 | -0.00021 | -0.00018 | -0.00044 |
| 9991  | 1889.28 | 123.7 | 3.51 | 0.21  | 0.0190 | 0.0342 | 23.11 | 1.675 | -4.501 | 3.1377 | -0.00815 | 0.03185 | -0.03561 | -0.00260 | 0.01015 | -0.01135 | 0.00006  | -0.00001 | -0.00011 |
| 9992  | 1887.84 | 123.8 | 3.51 | 0.21  | 0.0210 | 0.0335 | 23.23 | 1.675 | -4.378 | 3.1345 | -0.00726 | 0.03224 | -0.03578 | -0.00232 | 0.01029 | -0.01141 | 0.00034  | 0.00013  | -0.00018 |
| 9993  | 1889.28 | 123.6 | 3.51 | 0.22  | 0.0258 | 0.0212 | 23.36 | 1.675 | -4.267 | 3.1374 | -0.00826 | 0.03307 | -0.03486 | -0.00263 | 0.01054 | -0.01111 | 0.00002  | 0.00038  | 0.00013  |
| 9994  | 1887.26 | 123.9 | 3.51 | 0.21  | 0.0176 | 0.0316 | 23.48 | 1.675 | -4.123 | 3.1341 | -0.00787 | 0.03195 | -0.03532 | -0.00251 | 0.01020 | -0.01127 | 0.00014  | 0.00004  | -0.00003 |
| 9995  | 1889.28 | 123.8 | 3.51 | 0.22  | 0.0214 | 0.0281 | 23.61 | 1.675 | -4.009 | 3.1380 | -0.00856 | 0.03208 | -0.03648 | -0.00273 | 0.01022 | -0.01163 | -0.00007 | 0.00006  | -0.00039 |
| 9996  | 1887.12 | 124.1 | 3.51 | 0.23  | 0.0211 | 0.0298 | 23.73 | 1.676 | -3.895 | 3.1343 | -0.00804 | 0.03048 | -0.03697 | -0.00256 | 0.00972 | -0.01179 | 0.00009  | -0.00044 | -0.00056 |
| 9997  | 1889.57 | 123.8 | 3.51 | 0.22  | 0.0228 | 0.0260 | 23.86 | 1.675 | -3.760 | 3.1372 | -0.00828 | 0.03297 | -0.03541 | -0.00264 | 0.01051 | -0.01129 | 0.00001  | 0.00035  | -0.00005 |
| 9998  | 1886.83 | 124.1 | 3.51 | 0.23  | 0.0218 | 0.0292 | 23.98 | 1.675 | -3.640 | 3.1324 | -0.00789 | 0.03153 | -0.03493 | -0.00252 | 0.01007 | -0.01115 | 0.00014  | -0.00009 | 0.00009  |
| 9999  | 1888.99 | 123.9 | 3.51 | 0.23  | 0.0214 | 0.0327 | 24.11 | 1.676 | -3.516 | 3.1373 | -0.00876 | 0.03172 | -0.03549 | -0.00279 | 0.01011 | -0.01131 | -0.00014 | -0.00005 | -0.00008 |
| 10000 | 1886.83 | 124.4 | 3.50 | 0.23  | 0.0231 | 0.0318 | 24.23 | 1.676 | -3.394 | 3.1335 | -0.00874 | 0.03371 | -0.03498 | -0.00279 | 0.01076 | -0.01116 | -0.00013 | 0.00060  | 0.00007  |
| 10001 | 1888.70 | 124.0 | 3.51 | 0.23  | 0.0200 | 0.0366 | 24.36 | 1.675 | -3.264 | 3.1364 | -0.00749 | 0.03398 | -0.03613 | -0.00239 | 0.01084 | -0.01152 | 0.00027  | 0.00067  | -0.00028 |
| 10002 | 1887.41 | 124.2 | 3.51 | 0.24  | 0.0228 | 0.0354 | 24.48 | 1.676 | -3.147 | 3.1343 | -0.00780 | 0.03495 | -0.03567 | -0.00249 | 0.01115 | -0.01138 | 0.00017  | 0.00099  | -0.00014 |
| 10003 | 1889.42 | 123.9 | 3.51 | 0.23  | 0.0214 | 0.0299 | 24.61 | 1.675 | -3.017 | 3.1371 | -0.00536 | 0.03572 | -0.03543 | -0.00171 | 0.01139 | -0.01129 | 0.00095  | 0.00123  | -0.00006 |
| 10004 | 1888.56 | 123.9 | 3.51 | 0.22  | 0.0183 | 0.0366 | 24.73 | 1.675 | -2.878 | 3.1355 | -0.00488 | 0.03287 | -0.03591 | -0.00156 | 0.01048 | -0.01145 | 0.00110  | 0.00032  | -0.00022 |
| 10005 | 1888.56 | 123.9 | 3.51 | 0.22  | 0.0193 | 0.0316 | 24.86 | 1.675 | -2.755 | 3.1356 | -0.00645 | 0.03158 | -0.03319 | -0.00206 | 0.01007 | -0.01058 | 0.00060  | -0.00009 | 0.00065  |
| 10006 | 1888.56 | 124.2 | 3.51 | 0.24  | 0.0241 | 0.0342 | 24.98 | 1.676 | -2.650 | 3.1354 | -0.00906 | 0.03093 | -0.03493 | -0.00289 | 0.00986 | -0.01114 | -0.00023 | -0.00030 | 0.00009  |
| 10007 | 1887.98 | 124.2 | 3.51 | 0.22  | 0.0200 | 0.0357 | 25.11 | 1.675 | -2.511 | 3.1351 | -0.01025 | 0.03170 | -0.03442 | -0.00327 | 0.01011 | -0.01098 | -0.00062 | -0.00005 | 0.00026  |
| 10008 | 1888.85 | 124.1 | 3.51 | 0.21  | 0.0207 | 0.0352 | 25.23 | 1.675 | -2.377 | 3.1362 | -0.00935 | 0.03260 | -0.03487 | -0.00298 | 0.01040 | -0.01112 | -0.00033 | 0.00024  | 0.00012  |
| 10009 | 1888.27 | 124.2 | 3.51 | 0.19  | 0.0145 | 0.0411 | 25.36 | 1.673 | -2.232 | 3.1361 | -0.00885 | 0.03599 | -0.03457 | -0.00282 | 0.01148 | -0.01102 | -0.00017 | 0.00132  | -0.00021 |
| 10010 | 1888.70 | 124.3 | 3.51 | 0.21  | 0.0200 | 0.0357 | 25.48 | 1.675 | -2.125 | 3.1360 | -0.00776 | 0.03860 | -0.03565 | -0.00247 | 0.01231 | -0.01137 | 0.00018  | 0.00215  | -0.00013 |
| 10011 | 1887.41 | 124.3 | 3.51 | 0.21  | 0.0190 | 0.0286 | 25.61 | 1.675 | -1.999 | 3.1340 | -0.00351 | 0.04044 | -0.03284 | -0.00112 | 0.01290 | -0.01048 | 0.00153  | 0.00274  | 0.00076  |
| 10012 | 1888.85 | 124.1 | 3.51 | 0.21  | 0.0200 | 0.0376 | 25.73 | 1.675 | -1.877 | 3.1355 | -0.00252 | 0.03897 | -0.03038 | -0.00080 | 0.01243 | -0.00969 | 0.00185  | 0.00227  | 0.00155  |
| 10013 | 1888.13 | 124.1 | 3.51 | 0.19  | 0.0166 | 0.0320 | 25.86 | 1.673 | -1.728 | 3.1359 | -0.00227 | 0.03517 | -0.03328 | -0.00072 | 0.01122 | -0.01061 | 0.00193  | 0.00106  | 0.00062  |
| 10014 | 1888.42 | 124.2 | 3.51 | 0.20  | 0.0207 | 0.0296 | 25.98 | 1.674 | -1.620 | 3.1360 | -0.00371 | 0.03050 | -0.03277 | -0.00118 | 0.00973 | -0.01045 | 0.00147  | -0.00043 | 0.00079  |
| 10015 | 1886.83 | 124.3 | 3.50 | 0.20  | 0.0200 | 0.0301 | 26.11 | 1.674 | -1.493 | 3.1329 | -0.00630 | 0.02991 | -0.03512 | -0.00201 | 0.00955 | -0.01121 | 0.00064  | -0.00061 | 0.00003  |
| 10016 | 1889.14 | 124.0 | 3.51 | 0.19  | 0.0159 | 0.0334 | 26.23 | 1.674 | -1.360 | 3.1368 | -0.01112 | 0.02852 | -0.03644 | -0.00355 | 0.00909 | -0.01162 | -0.00089 | -0.00107 | -0.00038 |
| 10017 | 1887.12 | 124.2 | 3.51 | 0.20  | 0.0194 | 0.0242 | 26.36 | 1.674 | -1.244 | 3.1336 | -0.01177 | 0.03221 | -0.03613 | -0.00376 | 0.01028 | -0.01153 | -0.00110 | 0.00012  | -0.00029 |
| 10018 | 1888.70 | 124.0 | 3.51 | 0.22  | 0.0186 | 0.0275 | 26.48 | 1.675 | -1.132 | 3.1355 | -0.01048 | 0.03570 | -0.03564 | -0.00334 | 0.01139 | -0.01137 | -0.00069 | 0.00123  | -0.00013 |
| 10019 | 1885.97 | 124.2 | 3.50 | 0.22  | 0.0180 | 0.0262 | 26.61 | 1.675 | -1.008 | 3.1329 | -0.00958 | 0.04053 | -0.03225 | -0.00306 | 0.01294 | -0.01029 | -0.00040 | 0.00278  | 0.00094  |
| 10020 | 1889.28 | 124.1 | 3.51 | 0.24  | 0.0169 | 0.0312 | 26.73 | 1.676 | -0.897 | 3.1365 | -0.00275 | 0.04222 | -0.02950 | -0.00088 | 0.01346 | -0.00940 | 0.00178  | 0.00330  | 0.00183  |
| 10021 | 1886.26 | 124.2 | 3.50 | 0.24  | 0.0180 | 0.0309 | 26.86 | 1.676 | -0.773 | 3.1335 | -0.00032 | 0.04085 | -0.03013 | -0.00010 | 0.01304 | -0.00962 | 0.00255  | 0.00288  | 0.00162  |
| 10022 | 1889.14 | 123.9 | 3.51 | 0.24  | 0.0186 | 0.0312 | 26.98 | 1.676 | -0.652 | 3.1372 | -0.00219 | 0.03850 | -0.02954 | -0.00070 | 0.01227 | -0.00941 | 0.00335  | 0.00211  | 0.00182  |
| 10023 | 1886.26 | 124.4 | 3.50 | 0.23  | 0.0139 | 0.0370 | 27.11 | 1.675 | -0.508 | 3.1323 | -0.00114 | 0.03532 | -0.03083 | -0.00036 | 0.01127 | -0.00984 | 0.00229  | 0.00111  | 0.00139  |
| 10024 | 1889.57 | 123.9 | 3.51 | 0.21  | 0.0173 | 0.0333 | 27.23 | 1.674 | -0.371 | 3.1383 | -0.00428 | 0.03179 | -0.03329 | -0.00136 | 0.01013 | -0.01061 | 0.00129  | -0.00003 | 0.00063  |
| 10025 | 1886.11 | 124.1 | 3.50 | 0.23  | 0.0207 | 0.0315 | 27.36 | 1.676 | -0.270 | 3.1318 | -0.00571 | 0.02918 | -0.03751 | -0.00182 | 0.00932 | -0.01198 | 0.00083  | -0.00084 | -0.00074 |
| 10026 | 1888.99 | 123.7 | 3.51 | 0.22  | 0.0186 | 0.0340 | 27.48 | 1.675 | -0.133 | 3.1368 | -0.00935 | 0.03180 | -0.03664 | -0.00298 | 0.01014 | -0.01168 | -0.00033 | -0.00002 | -0.00045 |
| 10027 | 1886.98 | 124.1 | 3.51 | 0.23  | 0.0169 | 0.0340 | 27.61 | 1.675 | -0.010 | 3.1335 | -0.01102 | 0.03630 | -0.03529 | -0.00352 | 0.01159 | -0.01126 | -0.00086 | 0.00143  | -0.00003 |
| 10028 | 1889.28 | 123.9 | 3.51 | 0.23  | 0.0179 | 0.0336 | 27.73 | 1.675 | 0.110  | 3.1372 | -0.01003 | 0.04120 | -0.03328 | -0.00320 | 0.01313 | -0.01061 | -0.00054 | 0.00297  | 0.00063  |
| 10029 | 1886.98 | 124.2 | 3.51 | 0.23  | 0.0187 | 0.0313 | 27.86 | 1.675 | 0.239  | 3.1335 | -0.00375 | 0.04264 | -0.02623 | -0.00120 | 0.01361 | -0.00837 | 0.00146  | 0.00345  | 0.00287  |
| 10030 | 1889.28 | 124.0 | 3.51 | 0.23  | 0.0186 | 0.0331 | 27.98 | 1.675 |        |        |          |         |          |          |         |          |          |          |          |

Table A16. Continued.

Run = 149

M = 1.60

xsppos = 42.343

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c  |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|---------|
| 10050 | 1885.25 | 124.5 | 3.50 | 0.23  | 0.0231 | 0.0272 | 30.48 | 1.676 | 2.851  | 3.1317 | -0.00076 | 0.03947 | -0.02442 | -0.00024 | 0.01260 | -0.00780 | 0.00241  | 0.00244  | 0.00344 |
| 10051 | 1890.00 | 124.0 | 3.51 | 0.24  | 0.0221 | 0.0322 | 30.68 | 1.676 | 3.052  | 3.1380 | 0.00033  | 0.04139 | -0.02435 | 0.00011  | 0.01319 | -0.00776 | 0.00276  | 0.00303  | 0.00348 |
| 10052 | 1887.26 | 124.3 | 3.50 | 0.23  | 0.0207 | 0.0296 | 30.73 | 1.676 | 3.107  | 3.1337 | 0.00070  | 0.04165 | -0.02402 | 0.00022  | 0.01329 | -0.00766 | 0.00288  | 0.00313  | 0.00357 |
| 10053 | 1888.56 | 124.0 | 3.51 | 0.24  | 0.0197 | 0.0309 | 30.86 | 1.676 | 3.222  | 3.1360 | 0.00121  | 0.04257 | -0.02505 | 0.00039  | 0.01357 | -0.00799 | 0.00304  | 0.00341  | 0.00325 |
| 10054 | 1888.56 | 124.2 | 3.51 | 0.24  | 0.0224 | 0.0286 | 30.98 | 1.676 | 3.346  | 3.1359 | -0.00120 | 0.04348 | -0.02592 | -0.00038 | 0.01387 | -0.00827 | 0.00227  | 0.00371  | 0.00297 |
| 10055 | 1888.99 | 124.0 | 3.51 | 0.24  | 0.0214 | 0.0337 | 31.11 | 1.676 | 3.474  | 3.1372 | 0.00217  | 0.04440 | -0.02538 | 0.00069  | 0.01415 | -0.00809 | 0.00335  | 0.00399  | 0.00315 |
| 10056 | 1887.84 | 124.2 | 3.51 | 0.25  | 0.0224 | 0.0343 | 31.23 | 1.676 | 3.593  | 3.1350 | 0.00218  | 0.04389 | -0.02686 | 0.00070  | 0.01400 | -0.00857 | 0.00335  | 0.00384  | 0.00267 |
| 10057 | 1888.13 | 124.1 | 3.51 | 0.24  | 0.0186 | 0.0378 | 31.36 | 1.676 | 3.726  | 3.1365 | 0.00210  | 0.04251 | -0.02629 | 0.00067  | 0.01355 | -0.00838 | 0.00332  | 0.00339  | 0.00285 |
| 10058 | 1888.27 | 123.9 | 3.51 | 0.24  | 0.0210 | 0.0372 | 31.48 | 1.676 | 3.852  | 3.1369 | 0.00135  | 0.04213 | -0.02723 | 0.00043  | 0.01343 | -0.00868 | 0.00308  | 0.00327  | 0.00256 |
| 10059 | 1889.14 | 123.9 | 3.51 | 0.24  | 0.0203 | 0.0387 | 31.61 | 1.676 | 3.970  | 3.1375 | 0.00326  | 0.04193 | -0.02488 | 0.00104  | 0.01337 | -0.00793 | 0.00369  | 0.00321  | 0.00331 |
| 10060 | 1887.84 | 124.3 | 3.51 | 0.24  | 0.0221 | 0.0415 | 31.73 | 1.676 | 4.097  | 3.1347 | 0.00367  | 0.04077 | -0.02587 | 0.00117  | 0.01301 | -0.00825 | 0.00383  | 0.00285  | 0.00299 |
| 10061 | 1887.84 | 123.9 | 3.51 | 0.24  | 0.0221 | 0.0359 | 31.86 | 1.676 | 4.223  | 3.1349 | 0.00043  | 0.04126 | -0.02473 | 0.00014  | 0.01316 | -0.00789 | 0.00279  | 0.00300  | 0.00335 |
| 10062 | 1889.42 | 123.9 | 3.51 | 0.24  | 0.0245 | 0.0298 | 31.99 | 1.676 | 4.346  | 3.1384 | 0.00081  | 0.04139 | -0.02583 | 0.00026  | 0.01319 | -0.00823 | 0.00291  | 0.00303  | 0.00301 |
| 10063 | 1887.55 | 123.9 | 3.51 | 0.23  | 0.0228 | 0.0279 | 32.11 | 1.676 | 4.480  | 3.1356 | -0.00087 | 0.04325 | -0.02494 | -0.00028 | 0.01379 | -0.00795 | 0.00238  | 0.00363  | 0.00328 |
| 10064 | 1888.85 | 123.8 | 3.51 | 0.25  | 0.0234 | 0.0283 | 32.23 | 1.676 | 4.593  | 3.1363 | 0.00165  | 0.04790 | -0.02245 | 0.00053  | 0.01527 | -0.00716 | 0.00318  | 0.00511  | 0.00408 |
| 10065 | 1887.70 | 123.9 | 3.51 | 0.23  | 0.0238 | 0.0257 | 32.36 | 1.676 | 4.726  | 3.1362 | 0.00408  | 0.04594 | -0.02355 | 0.00130  | 0.01465 | -0.00751 | 0.00395  | 0.00449  | 0.00373 |
| 10066 | 1888.42 | 123.9 | 3.51 | 0.25  | 0.0283 | 0.0235 | 32.48 | 1.677 | 4.832  | 3.1354 | 0.00479  | 0.04822 | -0.02216 | 0.00153  | 0.01538 | -0.00707 | 0.00418  | 0.00522  | 0.00417 |
| 10067 | 1888.70 | 123.9 | 3.51 | 0.26  | 0.0238 | 0.0266 | 32.60 | 1.677 | 4.953  | 3.1354 | 0.00804  | 0.04609 | -0.02147 | 0.00256  | 0.01470 | -0.00685 | 0.00522  | 0.00454  | 0.00439 |
| 10068 | 1887.98 | 124.0 | 3.51 | 0.24  | 0.0224 | 0.0305 | 32.73 | 1.676 | 5.092  | 3.1349 | 0.00638  | 0.04498 | -0.02278 | 0.00204  | 0.01435 | -0.00727 | 0.00469  | 0.00419  | 0.00397 |
| 10069 | 1887.70 | 123.9 | 3.51 | 0.24  | 0.0221 | 0.0285 | 32.86 | 1.676 | 5.221  | 3.1352 | 0.00438  | 0.04414 | -0.02287 | 0.00140  | 0.01408 | -0.00730 | 0.00405  | 0.00392  | 0.00394 |
| 10070 | 1888.42 | 124.0 | 3.51 | 0.26  | 0.0255 | 0.0285 | 32.98 | 1.677 | 5.329  | 3.1353 | 0.00308  | 0.04548 | -0.02315 | 0.00098  | 0.01451 | -0.00739 | 0.00364  | 0.00435  | 0.00385 |
| 10071 | 1888.56 | 123.9 | 3.51 | 0.25  | 0.0210 | 0.0288 | 33.10 | 1.676 | 5.465  | 3.1353 | 0.00364  | 0.04442 | -0.02284 | 0.00116  | 0.01417 | -0.00728 | 0.00382  | 0.00401  | 0.00395 |
| 10072 | 1888.56 | 124.1 | 3.51 | 0.25  | 0.0265 | 0.0300 | 33.23 | 1.677 | 5.583  | 3.1367 | 0.00253  | 0.04264 | -0.02354 | 0.00081  | 0.01359 | -0.00750 | 0.00346  | 0.00343  | 0.00373 |
| 10073 | 1887.98 | 124.1 | 3.51 | 0.24  | 0.0269 | 0.0274 | 33.35 | 1.676 | 5.717  | 3.1357 | 0.00271  | 0.04413 | -0.02043 | 0.00086  | 0.01407 | -0.00651 | 0.00352  | 0.00391  | 0.00472 |
| 10074 | 1888.42 | 124.2 | 3.51 | 0.26  | 0.0221 | 0.0350 | 33.48 | 1.677 | 5.832  | 3.1362 | 0.00334  | 0.04307 | -0.01793 | 0.00106  | 0.01373 | -0.00572 | 0.00372  | 0.00357  | 0.00552 |
| 10075 | 1885.82 | 124.5 | 3.50 | 0.25  | 0.0224 | 0.0306 | 33.61 | 1.676 | 5.966  | 3.1316 | 0.00191  | 0.04514 | -0.01720 | 0.00061  | 0.01441 | -0.00549 | 0.00327  | 0.00425  | 0.00574 |
| 10076 | 1889.42 | 124.1 | 3.51 | 0.25  | 0.0234 | 0.0283 | 33.73 | 1.676 | 6.091  | 3.1372 | 0.00422  | 0.04609 | -0.01785 | 0.00134  | 0.01469 | -0.00569 | 0.00400  | 0.00453  | 0.00555 |
| 10077 | 1886.40 | 124.3 | 3.50 | 0.24  | 0.0218 | 0.0330 | 33.86 | 1.676 | 6.219  | 3.1334 | 0.00506  | 0.04670 | -0.01957 | 0.00161  | 0.01490 | -0.00624 | 0.00427  | 0.00474  | 0.00499 |
| 10078 | 1888.85 | 123.9 | 3.51 | 0.23  | 0.0224 | 0.0277 | 33.98 | 1.676 | 6.353  | 3.1381 | 0.00364  | 0.04554 | -0.02129 | 0.00116  | 0.01451 | -0.00678 | 0.00381  | 0.00435  | 0.00445 |
| 10079 | 1885.39 | 124.3 | 3.50 | 0.24  | 0.0194 | 0.0279 | 34.10 | 1.676 | 6.473  | 3.1311 | 0.00726  | 0.04557 | -0.02029 | 0.00232  | 0.01455 | -0.00648 | 0.00497  | 0.00439  | 0.00476 |
| 10080 | 1889.28 | 124.0 | 3.51 | 0.24  | 0.0238 | 0.0285 | 34.23 | 1.676 | 6.592  | 3.1370 | 0.00683  | 0.04933 | -0.01960 | 0.00218  | 0.01573 | -0.00625 | 0.00483  | 0.00557  | 0.00499 |
| 10081 | 1886.69 | 124.3 | 3.50 | 0.24  | 0.0176 | 0.0335 | 34.36 | 1.676 | 6.731  | 3.1320 | 0.00723  | 0.04867 | -0.02175 | 0.00231  | 0.01554 | -0.00694 | 0.00496  | 0.00538  | 0.00429 |
| 10082 | 1888.99 | 124.0 | 3.51 | 0.24  | 0.0207 | 0.0314 | 34.48 | 1.676 | 6.850  | 3.1366 | 0.00595  | 0.05141 | -0.02199 | 0.00190  | 0.01639 | -0.00701 | 0.00455  | 0.00623  | 0.00423 |
| 10083 | 1887.98 | 124.2 | 3.51 | 0.24  | 0.0197 | 0.0318 | 34.61 | 1.676 | 6.981  | 3.1341 | 0.00917  | 0.04979 | -0.02158 | 0.00293  | 0.01589 | -0.00689 | 0.00558  | 0.00573  | 0.00435 |
| 10084 | 1887.26 | 124.1 | 3.51 | 0.25  | 0.0197 | 0.0374 | 34.73 | 1.676 | 7.096  | 3.1355 | 0.00762  | 0.04887 | -0.02308 | 0.00243  | 0.01559 | -0.00736 | 0.00509  | 0.00543  | 0.00388 |
| 10085 | 1888.85 | 124.3 | 3.51 | 0.23  | 0.0155 | 0.0416 | 34.86 | 1.675 | 7.239  | 3.1366 | 0.00589  | 0.04777 | -0.01955 | 0.00188  | 0.01523 | -0.00623 | 0.00453  | 0.00507  | 0.00500 |
| 10086 | 1886.11 | 124.5 | 3.50 | 0.24  | 0.0204 | 0.0359 | 34.98 | 1.676 | 7.351  | 3.1325 | 0.00865  | 0.05016 | -0.01721 | 0.00276  | 0.01601 | -0.00549 | 0.00542  | 0.00585  | 0.00574 |
| 10087 | 1889.57 | 124.1 | 3.51 | 0.23  | 0.0138 | 0.0416 | 35.11 | 1.675 | 7.490  | 3.1377 | 0.00767  | 0.04799 | -0.01798 | 0.00244  | 0.01529 | -0.00573 | 0.00510  | 0.00513  | 0.00551 |
| 10088 | 1885.68 | 124.4 | 3.50 | 0.23  | 0.0156 | 0.0398 | 35.23 | 1.675 | 7.611  | 3.1313 | 0.00959  | 0.04632 | -0.01981 | 0.00306  | 0.01479 | -0.00633 | 0.00572  | 0.00463  | 0.00491 |
| 10089 | 1889.28 | 124.2 | 3.51 | 0.23  | 0.0207 | 0.0296 | 35.36 | 1.676 | 7.731  | 3.1376 | 0.00717  | 0.04547 | -0.01746 | 0.00228  | 0.01449 | -0.00556 | 0.00494  | 0.00433  | 0.00567 |
| 10090 | 1886.83 | 124.6 | 3.50 | 0.24  | 0.0163 | 0.0365 | 35.48 | 1.676 | 7.858  | 3.1328 | 0.00648  | 0.04160 | -0.01862 | 0.00207  | 0.01328 | -0.00594 | 0.00472  | 0.00312  | 0.00529 |
| 10091 | 1889.86 | 124.0 | 3.51 | 0.24  | 0.0155 | 0.0342 | 35.61 | 1.676 | 7.982  | 3.1385 | 0.00288  | 0.03826 | -0.01856 | 0.00092  | 0.01219 | -0.00591 | 0.00357  | 0.00203  | 0.00532 |
| 10092 | 1887.12 | 124.2 | 3.51 | 0.25  | 0.0190 | 0.0333 | 35.73 | 1.676 | 8.092  | 3.1331 | 0.00144  | 0.03881 | -0.01727 | 0.00046  | 0.01239 | -0.00551 | 0.00311  | 0.00223  | 0.00572 |
| 10093 | 1889.71 | 123.9 | 3.51 | 0.23  | 0.0166 | 0.0357 | 35.86 | 1.675 | 8.241  | 3.1378 | -0.00084 | 0.03620 | -0.01859 | -0.00027 | 0.01154 | -0.00592 | 0.00239  | 0.00138  | 0.00531 |
| 10094 | 1886.98 | 124.1 | 3.51 | 0.23  | 0.0152 | 0.0350 | 35.98 | 1.675 | 8.365  | 3.1329 | -0.00290 | 0.03490 | -0.01792 | -0.00093 | 0.01114 | -0.00572 | 0.00173  | 0.00098  | 0.00552 |
| 10095 | 1889.42 | 123.8 | 3.51 | 0.24  | 0.0166 | 0.0357 | 36.11 | 1.676 | 8.482  | 3.1377 | -0.00537 | 0.03206 | -0.01764 | -0.00171 | 0.01022 | -0.00562 | 0.00094  | 0.00006  | 0.00561 |
| 10096 | 1886.26 | 124.2 | 3.50 | 0.22  | 0.0166 | 0.0329 | 36.23 | 1.675 | 8.624  | 3.1322 | -0.00590 | 0.03043 | -0.01757 | -0.00188 | 0.00971 | -0.00561 | 0.00077  | -0.00045 | 0.00563 |
| 10097 | 1889.42 | 123.9 | 3.51 | 0.23  | 0.0169 | 0.0349 | 36.36 | 1.675 | 8.737  | 3.1377 | -0.00844 | 0.02479 | -0.01809 | -0.00269 | 0.00790 | -0.00577 | -0.00004 | -0.00226 | 0.00547 |
| 10098 | 1887.41 | 124.3 | 3.51 | 0.23  | 0.0162 | 0.0374 | 36.48 | 1.675 | 8.863  | 3.1338 | -0.01151 | 0.02042 | -0.02050 | -0.00367 | 0.00652 | -0.00654 | -0.00102 | -0.00364 | 0.00470 |
| 10099 | 1888.70 | 123.8 | 3.51 | 0.24  | 0.0197 | 0.0355 | 36.61 | 1.676 | 8.981  | 3.1381 | -0.01422 | 0.01736 | -0.02259 | -0.00453 | 0.00553 | -0.00720 | -0.00188 | -0.00463 | 0.00404 |
| 10100 | 1887.84 | 124.0 | 3.51 | 0.22  | 0.0156 | 0.0379 | 36.73 | 1.675 | 9.123  | 3.1352 | -0.02059 | 0.00882 | -0.02500 | -0.00657 | 0.00281 | -0.00797 | -0.00391 | -0.00735 | 0.00326 |
| 10101 | 1889.28 | 123.8 | 3.51 | 0.21  | 0.0114 | 0.0468 | 36.86 | 1.674 | 9.256  | 3.1370 | -0.02290 | 0.00861 | -0.02805 | -0.00730 | 0.00275 | -0.00894 | -0.00465 | -0.00741 | 0.00229 |
| 10102 | 1886.83 | 124.2 | 3.50 | 0.23  | 0.0197 | 0.0374 | 36.99 | 1.675 | 9.363  | 3.1333 | -0.02920 | 0.00341 | -0.02863 | -0.00932 | 0.00109 | -0.00914 | -0.00666 | -0.00907 | 0.00210 |
| 10103 | 1889.28 | 124.1 | 3.51 | 0.23  | 0.0162 | 0.0401 |       |       |        |        |          |         |          |          |         |          |          |          |         |

Table A16. Concluded.

Run = 149

M = 1.60

xsppos = 42.347

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 10123 | 1889.71 | 124.0 | 3.51 | 0.23  | 0.0200 | 0.0376 | 39.61 | 1.675 | 11.990 | 3.1388 | -0.01206 | 0.03060 | -0.05667 | -0.00384 | 0.00975 | -0.01806 | -0.00119 | -0.00041 | -0.00682 |
| 10124 | 1885.25 | 124.4 | 3.50 | 0.24  | 0.0200 | 0.0358 | 39.73 | 1.676 | 12.105 | 3.1315 | -0.01059 | 0.03154 | -0.05081 | -0.00338 | 0.01007 | -0.01622 | -0.00073 | -0.00009 | -0.00499 |
| 10125 | 1889.57 | 124.1 | 3.51 | 0.24  | 0.0251 | 0.0292 | 39.86 | 1.676 | 12.223 | 3.1382 | -0.01186 | 0.03037 | -0.04884 | -0.00378 | 0.00968 | -0.01556 | -0.00112 | -0.00048 | -0.00433 |
| 10126 | 1884.67 | 124.4 | 3.50 | 0.24  | 0.0204 | 0.0350 | 39.98 | 1.676 | 12.352 | 3.1301 | -0.00955 | 0.03001 | -0.04266 | -0.00305 | 0.00959 | -0.01363 | -0.00040 | -0.00057 | -0.00239 |
| 10127 | 1889.71 | 124.0 | 3.51 | 0.23  | 0.0190 | 0.0370 | 40.11 | 1.675 | 12.488 | 3.1376 | -0.00964 | 0.03017 | -0.04072 | -0.00307 | 0.00962 | -0.01298 | -0.00042 | -0.00054 | -0.00174 |
| 10128 | 1885.82 | 124.2 | 3.50 | 0.24  | 0.0228 | 0.0354 | 40.23 | 1.676 | 12.603 | 3.1327 | -0.00900 | 0.02828 | -0.04233 | -0.00287 | 0.00903 | -0.01351 | -0.00022 | -0.00113 | -0.00228 |
| 10129 | 1889.28 | 124.0 | 3.51 | 0.24  | 0.0207 | 0.0361 | 40.36 | 1.676 | 12.724 | 3.1377 | -0.00912 | 0.02692 | -0.04293 | -0.00291 | 0.00858 | -0.01368 | -0.00025 | -0.00158 | -0.00244 |
| 10130 | 1885.82 | 124.2 | 3.50 | 0.25  | 0.0231 | 0.0319 | 40.48 | 1.677 | 12.842 | 3.1324 | -0.01162 | 0.02546 | -0.04194 | -0.00371 | 0.00813 | -0.01339 | -0.00105 | -0.00203 | -0.00215 |
| 10131 | 1889.57 | 124.0 | 3.51 | 0.25  | 0.0245 | 0.0335 | 40.61 | 1.677 | 12.965 | 3.1369 | -0.00987 | 0.02632 | -0.04270 | -0.00315 | 0.00839 | -0.01361 | -0.00049 | -0.00177 | -0.00238 |
| 10132 | 1885.25 | 124.3 | 3.50 | 0.25  | 0.0235 | 0.0321 | 40.73 | 1.677 | 13.092 | 3.1303 | -0.01367 | 0.02288 | -0.03986 | -0.00437 | 0.00731 | -0.01273 | -0.00171 | -0.00285 | -0.00150 |
| 10133 | 1889.28 | 123.9 | 3.51 | 0.24  | 0.0217 | 0.0357 | 40.86 | 1.676 | 13.224 | 3.1373 | -0.01534 | 0.02143 | -0.04111 | -0.00489 | 0.00683 | -0.01310 | -0.00224 | -0.00333 | -0.00187 |
| 10134 | 1885.25 | 124.3 | 3.50 | 0.23  | 0.0176 | 0.0391 | 40.98 | 1.676 | 13.360 | 3.1301 | -0.01526 | 0.02137 | -0.03948 | -0.00487 | 0.00683 | -0.01261 | -0.00222 | -0.00333 | -0.00138 |
| 10135 | 1889.57 | 123.9 | 3.51 | 0.23  | 0.0169 | 0.0424 | 41.11 | 1.675 | 13.486 | 3.1380 | -0.01693 | 0.02143 | -0.04051 | -0.00539 | 0.00683 | -0.01291 | -0.00274 | -0.00333 | -0.00167 |
| 10136 | 1885.54 | 124.2 | 3.50 | 0.24  | 0.0218 | 0.0302 | 41.23 | 1.676 | 13.601 | 3.1314 | -0.01767 | 0.02479 | -0.03982 | -0.00564 | 0.00792 | -0.01272 | -0.00299 | -0.00224 | -0.00148 |
| 10137 | 1889.42 | 123.9 | 3.51 | 0.24  | 0.0231 | 0.0346 | 41.36 | 1.676 | 13.721 | 3.1380 | -0.01537 | 0.02865 | -0.04066 | -0.00490 | 0.00913 | -0.01296 | -0.00224 | -0.00103 | -0.00172 |
| 10138 | 1885.54 | 124.3 | 3.50 | 0.24  | 0.0207 | 0.0380 | 41.48 | 1.676 | 13.848 | 3.1314 | -0.01125 | 0.03255 | -0.03876 | -0.00359 | 0.01039 | -0.01238 | -0.00094 | 0.00023  | -0.00114 |
| 10139 | 1888.99 | 124.0 | 3.51 | 0.26  | 0.0221 | 0.0331 | 41.61 | 1.677 | 13.959 | 3.1376 | -0.00805 | 0.03163 | -0.03980 | -0.00257 | 0.01008 | -0.01268 | 0.00009  | -0.00008 | -0.00145 |
| 10140 | 1885.97 | 124.2 | 3.50 | 0.25  | 0.0228 | 0.0354 | 41.73 | 1.677 | 14.088 | 3.1333 | -0.00921 | 0.02839 | -0.04107 | -0.00294 | 0.00906 | -0.01311 | -0.00028 | -0.00110 | -0.00187 |
| 10141 | 1888.99 | 123.7 | 3.51 | 0.24  | 0.0214 | 0.0355 | 41.86 | 1.676 | 14.223 | 3.1368 | -0.00887 | 0.02583 | -0.04269 | -0.00283 | 0.00823 | -0.01361 | -0.00017 | -0.00193 | -0.00237 |
| 10142 | 1887.41 | 123.9 | 3.51 | 0.25  | 0.0211 | 0.0354 | 41.99 | 1.676 | 14.346 | 3.1338 | -0.01062 | 0.02470 | -0.04256 | -0.00339 | 0.00788 | -0.01358 | -0.00073 | -0.00228 | -0.00234 |
| 10143 | 1888.70 | 123.9 | 3.51 | 0.25  | 0.0200 | 0.0376 | 42.11 | 1.676 | 14.468 | 3.1360 | -0.01413 | 0.02269 | -0.04536 | -0.00451 | 0.00724 | -0.01446 | -0.00185 | -0.00292 | -0.00323 |
| 10144 | 1887.70 | 123.9 | 3.51 | 0.25  | 0.0197 | 0.0337 | 42.23 | 1.676 | 14.596 | 3.1350 | -0.01614 | 0.02696 | -0.04390 | -0.00515 | 0.00860 | -0.01400 | -0.00250 | -0.00156 | -0.00277 |
| 10145 | 1888.85 | 124.1 | 3.51 | 0.26  | 0.0258 | 0.0249 | 42.36 | 1.677 | 14.710 | 3.1358 | -0.01605 | 0.02855 | -0.04299 | -0.00512 | 0.00910 | -0.01371 | -0.00246 | -0.00106 | -0.00247 |
| 10146 | 1887.70 | 124.0 | 3.51 | 0.24  | 0.0224 | 0.0315 | 42.49 | 1.676 | 14.851 | 3.1361 | -0.01247 | 0.03280 | -0.04005 | -0.00398 | 0.01046 | -0.01277 | -0.00132 | 0.00030  | -0.00154 |
| 10147 | 1888.85 | 124.0 | 3.51 | 0.26  | 0.0255 | 0.0294 | 42.61 | 1.677 | 14.959 | 3.1363 | -0.00667 | 0.03459 | -0.03828 | -0.00213 | 0.01103 | -0.01221 | 0.00053  | 0.00087  | -0.00097 |
| 10148 | 1888.13 | 123.9 | 3.51 | 0.24  | 0.0204 | 0.0312 | 42.74 | 1.676 | 15.102 | 3.1350 | -0.00440 | 0.03628 | -0.03515 | -0.00140 | 0.01157 | -0.01121 | 0.00125  | 0.00141  | 0.00002  |
| 10149 | 1888.56 | 124.1 | 3.51 | 0.25  | 0.0238 | 0.0266 | 42.86 | 1.676 | 15.222 | 3.1353 | -0.00700 | 0.03471 | -0.03728 | -0.00223 | 0.01107 | -0.01189 | 0.00042  | 0.00091  | -0.00065 |
| 10150 | 1888.99 | 123.9 | 3.51 | 0.25  | 0.0231 | 0.0281 | 42.99 | 1.677 | 15.342 | 3.1364 | -0.00556 | 0.03529 | -0.03723 | -0.00177 | 0.01125 | -0.01187 | 0.00088  | 0.00109  | -0.00063 |
| 10151 | 1887.98 | 124.2 | 3.51 | 0.24  | 0.0186 | 0.0350 | 43.11 | 1.676 | 15.477 | 3.1346 | -0.00657 | 0.03272 | -0.04045 | -0.00210 | 0.01044 | -0.01291 | 0.00056  | 0.00028  | -0.00167 |
| 10152 | 1888.99 | 124.0 | 3.51 | 0.23  | 0.0193 | 0.0316 | 43.24 | 1.676 | 15.612 | 3.1370 | -0.00740 | 0.03320 | -0.04278 | -0.00236 | 0.01058 | -0.01364 | 0.00030  | 0.00042  | -0.00240 |
| 10153 | 1887.55 | 124.3 | 3.50 | 0.24  | 0.0207 | 0.0296 | 43.36 | 1.676 | 15.734 | 3.1344 | -0.00655 | 0.03188 | -0.04227 | -0.00209 | 0.01017 | -0.01349 | 0.00056  | 0.00001  | -0.00225 |
| 10154 | 1888.85 | 124.1 | 3.51 | 0.25  | 0.0228 | 0.0298 | 43.48 | 1.677 | 15.842 | 3.1370 | -0.00743 | 0.03235 | -0.04167 | -0.00237 | 0.01031 | -0.01328 | 0.00029  | 0.00015  | -0.00205 |
| 10155 | 1888.42 | 124.2 | 3.51 | 0.24  | 0.0162 | 0.0374 | 43.61 | 1.676 | 15.981 | 3.1347 | -0.00926 | 0.03194 | -0.03569 | -0.00296 | 0.01019 | -0.01138 | -0.00030 | 0.00003  | -0.00015 |
| 10156 | 1888.99 | 124.1 | 3.51 | 0.25  | 0.0238 | 0.0229 | 43.73 | 1.677 | 16.090 | 3.1377 | -0.00841 | 0.03095 | -0.03361 | -0.00268 | 0.00987 | -0.01071 | -0.00002 | -0.00030 | 0.00052  |
| 10157 | 1887.70 | 124.4 | 3.50 | 0.24  | 0.0190 | 0.0324 | 43.86 | 1.676 | 16.228 | 3.1344 | -0.00972 | 0.03065 | -0.03161 | -0.00310 | 0.00978 | -0.01009 | -0.00045 | -0.00038 | 0.00115  |
| 10158 | 1889.28 | 124.1 | 3.51 | 0.25  | 0.0255 | 0.0238 | 43.98 | 1.677 | 16.342 | 3.1385 | -0.00839 | 0.03115 | -0.03203 | -0.00267 | 0.00993 | -0.01021 | -0.00002 | -0.00023 | 0.00103  |
| 10159 | 1887.70 | 124.5 | 3.50 | 0.25  | 0.0238 | 0.0303 | 44.11 | 1.677 | 16.465 | 3.1338 | -0.00945 | 0.03243 | -0.03011 | -0.00302 | 0.01035 | -0.00961 | -0.00036 | 0.00019  | 0.00163  |
| 10160 | 1889.28 | 124.1 | 3.51 | 0.25  | 0.0173 | 0.0342 | 44.23 | 1.676 | 16.600 | 3.1377 | -0.00968 | 0.03186 | -0.03242 | -0.00309 | 0.01015 | -0.01033 | -0.00043 | -0.00001 | 0.00091  |
| 10161 | 1887.98 | 124.3 | 3.51 | 0.25  | 0.0207 | 0.0296 | 44.36 | 1.676 | 16.722 | 3.1343 | -0.00908 | 0.03232 | -0.03199 | -0.00290 | 0.01031 | -0.01021 | -0.00024 | 0.00015  | 0.00103  |
| 10162 | 1888.42 | 124.1 | 3.51 | 0.24  | 0.0200 | 0.0301 | 44.48 | 1.676 | 16.852 | 3.1369 | -0.00878 | 0.03099 | -0.03273 | -0.00280 | 0.00988 | -0.01043 | -0.00014 | -0.00028 | 0.00080  |
| 10163 | 1888.27 | 124.2 | 3.51 | 0.25  | 0.0245 | 0.0270 | 44.61 | 1.677 | 16.967 | 3.1371 | -0.00905 | 0.02994 | -0.03634 | -0.00289 | 0.00954 | -0.01158 | -0.00023 | -0.00062 | -0.00035 |
| 10164 | 1888.99 | 124.0 | 3.51 | 0.25  | 0.0217 | 0.0292 | 44.74 | 1.676 | 17.095 | 3.1376 | -0.00874 | 0.03211 | -0.03511 | -0.00279 | 0.01023 | -0.01119 | -0.00013 | 0.00007  | 0.00005  |
| 10165 | 1887.98 | 124.2 | 3.51 | 0.24  | 0.0204 | 0.0285 | 44.86 | 1.676 | 17.228 | 3.1347 | -0.00980 | 0.03264 | -0.03425 | -0.00313 | 0.01041 | -0.01093 | -0.00047 | 0.00025  | 0.00031  |
| 10166 | 1888.99 | 123.9 | 3.51 | 0.24  | 0.0210 | 0.0297 | 44.99 | 1.676 | 17.351 | 3.1372 | -0.00920 | 0.03196 | -0.03386 | -0.00293 | 0.01019 | -0.01079 | -0.00028 | 0.00003  | 0.00044  |
| 10167 | 1887.70 | 124.1 | 3.51 | 0.24  | 0.0217 | 0.0320 | 45.11 | 1.676 | 17.476 | 3.1343 | -0.00952 | 0.03108 | -0.03504 | -0.00304 | 0.00992 | -0.01118 | -0.00038 | -0.00024 | 0.00006  |
| 10168 | 1887.98 | 123.9 | 3.51 | 0.25  | 0.0214 | 0.0281 | 45.24 | 1.677 | 17.594 | 3.1358 | -0.00878 | 0.03168 | -0.03553 | -0.00280 | 0.01010 | -0.01133 | -0.00014 | -0.00006 | -0.00009 |
| 10169 | 1888.27 | 124.0 | 3.51 | 0.25  | 0.0224 | 0.0268 | 45.36 | 1.676 | 17.719 | 3.1351 | -0.00860 | 0.03140 | -0.03471 | -0.00274 | 0.01002 | -0.01107 | -0.00009 | -0.00014 | 0.00016  |
| 10170 | 1888.56 | 123.9 | 3.51 | 0.24  | 0.0214 | 0.0272 | 45.48 | 1.676 | 17.847 | 3.1366 | -0.00943 | 0.03155 | -0.03359 | -0.00301 | 0.01006 | -0.01071 | -0.00035 | -0.00010 | 0.00053  |
| 10171 | 1888.70 | 123.9 | 3.51 | 0.24  | 0.0210 | 0.0279 | 45.61 | 1.676 | 17.975 | 3.1362 | -0.01071 | 0.03201 | -0.03438 | -0.00341 | 0.01021 | -0.01096 | -0.00076 | 0.00005  | 0.00028  |
| 10172 | 1888.85 | 123.9 | 3.51 | 0.24  | 0.0245 | 0.0233 | 45.73 | 1.676 | 18.093 | 3.1368 | -0.00981 | 0.03191 | -0.03436 | -0.00313 | 0.01017 | -0.01095 | -0.00047 | 0.00001  | 0.00028  |
| 10173 | 1888.70 | 124.1 | 3.51 | 0.24  | 0.0207 | 0.0296 | 45.86 | 1.676 | 18.227 | 3.1366 | -0.00890 | 0.03098 | -0.03634 | -0.00284 | 0.00988 | -0.01158 | -0.00018 | -0.00028 | -0.00035 |

Table A17. Run 150.

Run = 150  
M = 1.60  
xsppos = 44.355

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 10174 | 1888.85 | 124.0 | 3.51 | 0.23  | 0.0179 | 0.0625 | 21.37 | 1.675 | -6.251 | 3.1375 | -0.00467 | 0.00958 | -0.02365 | -0.00149 | 0.00305 | -0.00754 | -0.00048 | -0.00014 | -0.00028 |
| 10175 | 1888.13 | 124.1 | 3.51 | 0.22  | 0.0145 | 0.0634 | 21.49 | 1.675 | -6.122 | 3.1344 | -0.00289 | 0.00998 | -0.02201 | -0.00092 | 0.00319 | -0.00702 | 0.00008  | -0.00001 | 0.00023  |
| 10176 | 1887.41 | 124.0 | 3.51 | 0.23  | 0.0183 | 0.0599 | 21.62 | 1.675 | -6.004 | 3.1347 | -0.00200 | 0.01043 | -0.02205 | -0.00064 | 0.00333 | -0.00703 | 0.00037  | 0.00013  | 0.00022  |
| 10177 | 1888.56 | 124.1 | 3.51 | 0.22  | 0.0183 | 0.0543 | 21.74 | 1.675 | -5.874 | 3.1356 | -0.00326 | 0.01082 | -0.02263 | -0.00104 | 0.00345 | -0.00722 | -0.00004 | 0.00026  | 0.00004  |
| 10178 | 1888.56 | 124.0 | 3.51 | 0.22  | 0.0162 | 0.0532 | 21.87 | 1.675 | -5.747 | 3.1371 | -0.00295 | 0.00928 | -0.02342 | -0.00094 | 0.00296 | -0.00746 | 0.00006  | -0.00024 | -0.00021 |
| 10179 | 1888.27 | 124.1 | 3.51 | 0.21  | 0.0162 | 0.0485 | 21.99 | 1.675 | -5.614 | 3.1342 | -0.00240 | 0.01266 | -0.02186 | -0.00077 | 0.00404 | -0.00697 | 0.00024  | 0.00084  | 0.00028  |
| 10180 | 1888.70 | 123.9 | 3.51 | 0.23  | 0.0217 | 0.0404 | 22.12 | 1.676 | -5.507 | 3.1361 | -0.00305 | 0.00915 | -0.02193 | -0.00097 | 0.00292 | -0.00699 | 0.00003  | -0.00028 | 0.00026  |
| 10181 | 1888.42 | 124.0 | 3.51 | 0.24  | 0.0265 | 0.0328 | 22.24 | 1.676 | -5.396 | 3.1355 | -0.00240 | 0.00904 | -0.02212 | -0.00076 | 0.00288 | -0.00706 | 0.00024  | -0.00031 | 0.00020  |
| 10182 | 1887.26 | 123.9 | 3.51 | 0.22  | 0.0193 | 0.0372 | 22.37 | 1.675 | -5.248 | 3.1334 | -0.00078 | 0.01124 | -0.02132 | -0.00025 | 0.00359 | -0.00680 | 0.00076  | 0.00039  | 0.00045  |
| 10183 | 1888.99 | 123.9 | 3.51 | 0.23  | 0.0217 | 0.0339 | 22.49 | 1.675 | -5.128 | 3.1371 | -0.00465 | 0.00876 | -0.02306 | -0.00148 | 0.00279 | -0.00735 | -0.00048 | -0.00040 | -0.00010 |
| 10184 | 1886.11 | 124.0 | 3.50 | 0.24  | 0.0259 | 0.0278 | 22.62 | 1.676 | -5.019 | 3.1316 | -0.00233 | 0.01053 | -0.02234 | -0.00074 | 0.00336 | -0.00713 | 0.00026  | 0.00017  | 0.00012  |
| 10185 | 1888.85 | 123.8 | 3.51 | 0.23  | 0.0190 | 0.0314 | 22.74 | 1.675 | -4.878 | 3.1375 | -0.00433 | 0.01094 | -0.02405 | -0.00138 | 0.00349 | -0.00766 | -0.00037 | 0.00029  | -0.00041 |
| 10186 | 1885.82 | 124.1 | 3.50 | 0.23  | 0.0221 | 0.0248 | 22.87 | 1.675 | -4.755 | 3.1320 | -0.00320 | 0.00967 | -0.02334 | -0.00102 | 0.00309 | -0.00745 | -0.00002 | -0.00011 | -0.00020 |
| 10187 | 1889.14 | 123.8 | 3.51 | 0.23  | 0.0228 | 0.0279 | 22.99 | 1.676 | -4.638 | 3.1382 | -0.00249 | 0.00882 | -0.02336 | -0.00079 | 0.00281 | -0.00744 | 0.00021  | -0.00038 | -0.00019 |
| 10188 | 1885.97 | 124.1 | 3.50 | 0.24  | 0.0221 | 0.0322 | 23.12 | 1.676 | -4.520 | 3.1325 | -0.00448 | 0.00857 | -0.02443 | -0.00143 | 0.00274 | -0.00780 | -0.00043 | -0.00046 | -0.00055 |
| 10189 | 1889.14 | 123.8 | 3.51 | 0.23  | 0.0186 | 0.0340 | 23.24 | 1.675 | -4.381 | 3.1368 | -0.00336 | 0.01055 | -0.02220 | -0.00107 | 0.00336 | -0.00708 | -0.00007 | 0.00017  | 0.00018  |
| 10190 | 1887.98 | 124.1 | 3.51 | 0.24  | 0.0204 | 0.0285 | 23.37 | 1.676 | -4.260 | 3.1342 | -0.00198 | 0.01084 | -0.02237 | -0.00063 | 0.00346 | -0.00714 | 0.00037  | 0.00026  | 0.00012  |
| 10191 | 1889.14 | 123.8 | 3.51 | 0.23  | 0.0200 | 0.0264 | 23.49 | 1.676 | -4.132 | 3.1371 | -0.00330 | 0.00960 | -0.02280 | -0.00105 | 0.00306 | -0.00727 | -0.00005 | -0.00013 | -0.00001 |
| 10192 | 1887.41 | 124.0 | 3.51 | 0.25  | 0.0245 | 0.0158 | 23.62 | 1.677 | -4.023 | 3.1335 | -0.00233 | 0.01011 | -0.02225 | -0.00074 | 0.00323 | -0.00710 | 0.00026  | 0.00003  | 0.00016  |
| 10193 | 1888.85 | 123.9 | 3.51 | 0.25  | 0.0231 | 0.0169 | 23.74 | 1.676 | -3.897 | 3.1367 | -0.00228 | 0.00969 | -0.02229 | -0.00073 | 0.00309 | -0.00710 | 0.00028  | -0.00010 | 0.00015  |
| 10194 | 1887.55 | 124.2 | 3.51 | 0.24  | 0.0207 | 0.0165 | 23.87 | 1.676 | -3.766 | 3.1334 | -0.00269 | 0.01159 | -0.02181 | -0.00086 | 0.00370 | -0.00696 | 0.00015  | 0.00050  | 0.00029  |
| 10195 | 1889.42 | 124.1 | 3.51 | 0.24  | 0.0241 | 0.0147 | 23.99 | 1.676 | -3.643 | 3.1371 | -0.00294 | 0.00967 | -0.02290 | -0.00094 | 0.00308 | -0.00730 | 0.00007  | -0.00011 | -0.00004 |
| 10196 | 1888.70 | 124.4 | 3.51 | 0.25  | 0.0262 | 0.0093 | 24.12 | 1.677 | -3.529 | 3.1359 | -0.00185 | 0.00975 | -0.02275 | -0.00059 | 0.00311 | -0.00726 | 0.00041  | -0.00009 | 0.00000  |
| 10197 | 1887.55 | 124.3 | 3.51 | 0.23  | 0.0221 | 0.0126 | 24.24 | 1.676 | -3.384 | 3.1350 | -0.00433 | 0.01030 | -0.02260 | -0.00138 | 0.00329 | -0.00721 | -0.00038 | 0.00009  | 0.00004  |
| 10198 | 1889.57 | 124.2 | 3.51 | 0.24  | 0.0228 | 0.0139 | 24.37 | 1.676 | -3.264 | 3.1386 | -0.00377 | 0.00932 | -0.02337 | -0.00120 | 0.00297 | -0.00745 | -0.00020 | -0.00023 | -0.00019 |
| 10199 | 1885.68 | 124.5 | 3.50 | 0.23  | 0.0242 | 0.0110 | 24.49 | 1.676 | -3.136 | 3.1314 | -0.00359 | 0.01251 | -0.02398 | -0.00115 | 0.00400 | -0.00766 | -0.00014 | 0.00080  | -0.00040 |
| 10200 | 1889.28 | 124.1 | 3.51 | 0.24  | 0.0231 | 0.0150 | 24.62 | 1.676 | -3.014 | 3.1383 | -0.00288 | 0.01239 | -0.02449 | -0.00092 | 0.00395 | -0.00780 | 0.00009  | 0.00075  | -0.00055 |
| 10201 | 1887.98 | 124.3 | 3.51 | 0.22  | 0.0204 | 0.0163 | 24.75 | 1.675 | -2.871 | 3.1349 | -0.00168 | 0.01201 | -0.02281 | -0.00054 | 0.00383 | -0.00728 | 0.00047  | 0.00064  | -0.00002 |
| 10202 | 1888.42 | 124.2 | 3.51 | 0.23  | 0.0211 | 0.0223 | 24.87 | 1.676 | -2.754 | 3.1370 | -0.00026 | 0.00945 | -0.02354 | -0.00008 | 0.00301 | -0.00750 | 0.00092  | -0.00018 | -0.00025 |
| 10203 | 1888.27 | 124.3 | 3.51 | 0.22  | 0.0207 | 0.0258 | 24.99 | 1.675 | -2.624 | 3.1361 | -0.00308 | 0.00734 | -0.02373 | -0.00098 | 0.00234 | -0.00757 | 0.00002  | -0.00086 | -0.00031 |
| 10204 | 1889.42 | 123.8 | 3.51 | 0.22  | 0.0241 | 0.0231 | 25.12 | 1.675 | -2.503 | 3.1371 | -0.00224 | 0.00849 | -0.02159 | -0.00071 | 0.00270 | -0.00688 | 0.00029  | -0.00049 | 0.00037  |
| 10205 | 1887.41 | 124.2 | 3.51 | 0.21  | 0.0193 | 0.0288 | 25.24 | 1.674 | -2.363 | 3.1343 | -0.00465 | 0.01011 | -0.02341 | -0.00148 | 0.00323 | -0.00747 | -0.00048 | 0.00003  | -0.00021 |
| 10206 | 1889.71 | 123.9 | 3.51 | 0.21  | 0.0197 | 0.0299 | 25.37 | 1.674 | -2.236 | 3.1383 | -0.00461 | 0.01132 | -0.02234 | -0.00147 | 0.00361 | -0.00712 | -0.00046 | 0.00041  | 0.00014  |
| 10207 | 1887.41 | 124.4 | 3.50 | 0.22  | 0.0218 | 0.0227 | 25.49 | 1.675 | -2.127 | 3.1340 | -0.00363 | 0.01410 | -0.02213 | -0.00116 | 0.00450 | -0.00706 | -0.00015 | 0.00131  | 0.00019  |
| 10208 | 1889.57 | 124.0 | 3.51 | 0.21  | 0.0180 | 0.0253 | 25.62 | 1.674 | -1.987 | 3.1382 | 0.00148  | 0.01837 | -0.02038 | 0.00047  | 0.00585 | -0.00649 | 0.00148  | 0.00266  | 0.00076  |
| 10209 | 1887.84 | 124.3 | 3.51 | 0.23  | 0.0262 | 0.0168 | 25.74 | 1.676 | -1.887 | 3.1346 | 0.00261  | 0.01682 | -0.01979 | 0.00083  | 0.00537 | -0.00631 | 0.00184  | 0.00217  | 0.00094  |
| 10210 | 1889.42 | 124.0 | 3.51 | 0.22  | 0.0228 | 0.0214 | 25.87 | 1.675 | -1.754 | 3.1377 | 0.00439  | 0.01672 | -0.02098 | 0.00140  | 0.00533 | -0.00669 | 0.00240  | 0.00213  | 0.00057  |
| 10211 | 1888.85 | 124.1 | 3.51 | 0.21  | 0.0200 | 0.0264 | 25.99 | 1.675 | -1.614 | 3.1367 | 0.00183  | 0.01220 | -0.02241 | 0.00058  | 0.00389 | -0.00715 | 0.00159  | 0.00070  | 0.00011  |
| 10212 | 1888.13 | 124.0 | 3.51 | 0.23  | 0.0235 | 0.0283 | 26.12 | 1.676 | -1.511 | 3.1367 | -0.00056 | 0.00914 | -0.02385 | -0.00018 | 0.00291 | -0.00760 | 0.00083  | -0.00028 | -0.00035 |
| 10213 | 1888.70 | 124.1 | 3.51 | 0.23  | 0.0241 | 0.0268 | 26.24 | 1.676 | -1.385 | 3.1373 | -0.00345 | 0.00592 | -0.02443 | -0.00110 | 0.00189 | -0.00779 | -0.00009 | -0.00131 | -0.00053 |
| 10214 | 1885.25 | 124.4 | 3.50 | 0.22  | 0.0207 | 0.0296 | 26.37 | 1.675 | -1.249 | 3.1313 | -0.00679 | 0.00604 | -0.02513 | -0.00217 | 0.00193 | -0.00802 | -0.00116 | -0.00126 | -0.00077 |
| 10215 | 1889.42 | 124.0 | 3.51 | 0.22  | 0.0204 | 0.0247 | 26.49 | 1.675 | -1.124 | 3.1368 | -0.00562 | 0.01155 | -0.02139 | -0.00179 | 0.00368 | -0.00682 | -0.00079 | 0.00049  | 0.00044  |
| 10216 | 1886.11 | 124.2 | 3.50 | 0.22  | 0.0228 | 0.0261 | 26.62 | 1.675 | -1.003 | 3.1316 | -0.00563 | 0.01385 | -0.01911 | -0.00180 | 0.00442 | -0.00610 | -0.00079 | 0.00123  | 0.00115  |
| 10217 | 1889.57 | 123.9 | 3.51 | 0.22  | 0.0221 | 0.0238 | 26.74 | 1.675 | -0.880 | 3.1372 | 0.00049  | 0.02052 | -0.01608 | 0.00016  | 0.00654 | -0.00513 | 0.00116  | 0.00335  | 0.00213  |
| 10218 | 1886.26 | 124.4 | 3.50 | 0.22  | 0.0214 | 0.0216 | 26.87 | 1.675 | -0.749 | 3.1328 | 0.00397  | 0.01912 | -0.01588 | 0.00127  | 0.00610 | -0.00507 | 0.00227  | 0.00291  | 0.00219  |
| 10219 | 1889.42 | 123.9 | 3.51 | 0.23  | 0.0217 | 0.0264 | 26.99 | 1.676 | -0.633 | 3.1389 | 0.00480  | 0.01743 | -0.02014 | 0.00153  | 0.00555 | -0.00642 | 0.00253  | 0.00236  | 0.00084  |
| 10220 | 1888.42 | 124.0 | 3.51 | 0.24  | 0.0231 | 0.0272 | 27.12 | 1.676 | -0.514 | 3.1352 | 0.00733  | 0.01802 | -0.01797 | 0.00234  | 0.00575 | -0.00573 | 0.00334  | 0.00255  | 0.00152  |
| 10221 | 1889.57 | 123.7 | 3.51 | 0.22  | 0.0176 | 0.0288 | 27.24 | 1.675 | -0.369 | 3.1393 | 0.00249  | 0.00934 | -0.02384 | 0.00079  | 0.00298 | -0.00759 | 0.00180  | -0.00022 | -0.00034 |
| 10222 | 1887.84 | 124.1 | 3.51 | 0.22  | 0.0207 | 0.0296 | 27.37 | 1.675 | -0.253 | 3.1335 | 0.00152  | 0.01004 | -0.02274 | 0.00049  | 0.00320 | -0.00726 | 0.00149  | 0.00001  | 0.00000  |
| 10223 | 1886.83 | 124.0 | 3.51 | 0.22  | 0.0187 | 0.0285 | 27.49 | 1.675 | -0.124 | 3.1334 | -0.00282 | 0.00819 | -0.02523 | -0.00090 | 0.00261 | -0.00805 | 0.00010  | -0.00058 | -0.00080 |
| 10224 | 1889.28 | 124.0 | 3.51 | 0.22  | 0.0217 | 0.0283 | 27.62 | 1.675 | -0.005 | 3.1375 | -0.00464 | 0.00777 | -0.02453 | -0.00148 | 0.00248 | -0.00782 | -0.00047 | -0.00072 | -0.00056 |
| 10225 | 1887.26 | 123.9 | 3.51 | 0.23  | 0.0187 | 0.0275 | 27.74 | 1.675 | 0.123  | 3.1341 | -0.00487 | 0.01505 | -0.01958 | -0.00156 | 0.00480 | -0.00625 | -0.00055 | 0.00161  | 0.00101  |
| 10226 | 1888.99 | 124.0 | 3.51 | 0.22  | 0.0180 | 0.0262 | 27.87 | 1.675 | 0.253  | 3.1371 | -0.00223 | 0.02026 | -0.01727 | -0.00071 | 0.00646 | -0.00550 | 0.00029  | 0.00327  | 0.00175  |
| 10227 | 1887.84 | 123.9 | 3.51 | 0.24  | 0.0221 | 0.0229 | 27.99 | 1.676 | 0.359  | 3.1346 | 0.00418  | 0.02205 | -0.01394 |          |         |          |          |          |          |



Table A17. Continued.

Run = 150  
M = 1.60  
xsppos = 44.353

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c  |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|---------|
| 10247 | 1889.14 | 124.0 | 3.51 | 0.21  | 0.0169 | 0.0312 | 30.49 | 1.674 | 2.884  | 3.1374 | 0.00588  | 0.01897  | -0.01424 | 0.00187  | 0.00605  | -0.00454 | 0.00288  | 0.00285  | 0.00271 |
| 10248 | 1885.25 | 124.4 | 3.50 | 0.22  | 0.0201 | 0.0246 | 30.62 | 1.675 | 2.998  | 3.1308 | 0.00491  | 0.01910  | -0.01502 | 0.00157  | 0.00610  | -0.00480 | 0.00257  | 0.00291  | 0.00246 |
| 10249 | 1889.28 | 124.1 | 3.51 | 0.23  | 0.0217 | 0.0236 | 30.74 | 1.676 | 3.116  | 3.1374 | 0.00505  | 0.01864  | -0.01515 | 0.00161  | 0.00594  | -0.00483 | 0.00261  | 0.00275  | 0.00243 |
| 10250 | 1887.26 | 124.6 | 3.50 | 0.23  | 0.0224 | 0.0249 | 30.87 | 1.676 | 3.239  | 3.1338 | 0.00503  | 0.02062  | -0.01412 | 0.00161  | 0.00658  | -0.00450 | 0.00261  | 0.00339  | 0.00275 |
| 10251 | 1889.28 | 124.3 | 3.51 | 0.23  | 0.0231 | 0.0225 | 30.99 | 1.676 | 3.365  | 3.1381 | 0.00429  | 0.02083  | -0.01539 | 0.00137  | 0.00664  | -0.00490 | 0.00237  | 0.00344  | 0.00235 |
| 10252 | 1887.70 | 124.6 | 3.50 | 0.23  | 0.0235 | 0.0218 | 31.12 | 1.676 | 3.490  | 3.1337 | 0.00655  | 0.02223  | -0.01526 | 0.00209  | 0.00710  | -0.00487 | 0.00310  | 0.00390  | 0.00238 |
| 10253 | 1889.28 | 124.1 | 3.51 | 0.23  | 0.0241 | 0.0212 | 31.24 | 1.676 | 3.610  | 3.1381 | 0.00669  | 0.02325  | -0.01493 | 0.00213  | 0.00741  | -0.00476 | 0.00314  | 0.00421  | 0.00250 |
| 10254 | 1887.55 | 124.1 | 3.51 | 0.23  | 0.0221 | 0.0285 | 31.37 | 1.676 | 3.741  | 3.1342 | 0.00750  | 0.02305  | -0.01497 | 0.00239  | 0.00735  | -0.00478 | 0.00340  | 0.00416  | 0.00248 |
| 10255 | 1889.86 | 123.7 | 3.51 | 0.23  | 0.0207 | 0.0249 | 31.49 | 1.676 | 3.867  | 3.1386 | 0.00761  | 0.02120  | -0.01581 | 0.00242  | 0.00675  | -0.00504 | 0.00343  | 0.00356  | 0.00222 |
| 10256 | 1887.55 | 124.1 | 3.51 | 0.23  | 0.0221 | 0.0238 | 31.62 | 1.676 | 3.993  | 3.1349 | 0.00623  | 0.02027  | -0.01636 | 0.00199  | 0.00647  | -0.00522 | 0.00299  | 0.00327  | 0.00204 |
| 10257 | 1888.56 | 124.0 | 3.51 | 0.22  | 0.0193 | 0.0288 | 31.74 | 1.675 | 4.123  | 3.1371 | 0.00746  | 0.02044  | -0.01465 | 0.00238  | 0.00651  | -0.00467 | 0.00338  | 0.00332  | 0.00259 |
| 10258 | 1888.70 | 124.1 | 3.51 | 0.22  | 0.0190 | 0.0277 | 31.87 | 1.675 | 4.250  | 3.1363 | 0.00589  | 0.01966  | -0.01544 | 0.00188  | 0.00627  | -0.00492 | 0.00288  | 0.00307  | 0.00233 |
| 10259 | 1884.67 | 124.2 | 3.50 | 0.22  | 0.0194 | 0.0279 | 31.99 | 1.675 | 4.374  | 3.1301 | 0.00551  | 0.02000  | -0.01586 | 0.00176  | 0.00639  | -0.00507 | 0.00277  | 0.00319  | 0.00219 |
| 10260 | 1889.86 | 123.8 | 3.51 | 0.23  | 0.0231 | 0.0262 | 32.12 | 1.676 | 4.485  | 3.1391 | 0.00540  | 0.02195  | -0.01421 | 0.00172  | 0.00699  | -0.00453 | 0.00273  | 0.00380  | 0.00273 |
| 10261 | 1886.11 | 124.3 | 3.50 | 0.23  | 0.0242 | 0.0222 | 32.24 | 1.676 | 4.613  | 3.1312 | 0.00681  | 0.02285  | -0.01298 | 0.00217  | 0.00730  | -0.00415 | 0.00318  | 0.00410  | 0.00311 |
| 10262 | 1889.86 | 123.6 | 3.52 | 0.22  | 0.0224 | 0.0258 | 32.37 | 1.675 | 4.746  | 3.1385 | 0.00925  | 0.02572  | -0.01264 | 0.00295  | 0.00819  | -0.00403 | 0.00395  | 0.00500  | 0.00323 |
| 10263 | 1885.39 | 124.0 | 3.50 | 0.23  | 0.0235 | 0.0171 | 32.49 | 1.675 | 4.867  | 3.1307 | 0.00912  | 0.02652  | -0.01304 | 0.00291  | 0.00847  | -0.00417 | 0.00392  | 0.00527  | 0.00309 |
| 10264 | 1889.14 | 123.8 | 3.51 | 0.22  | 0.0217 | 0.0283 | 32.67 | 1.675 | 5.049  | 3.1372 | 0.01210  | 0.02581  | -0.01190 | 0.00386  | 0.00823  | -0.00379 | 0.00486  | 0.00503  | 0.00346 |
| 10265 | 1886.98 | 124.1 | 3.51 | 0.22  | 0.0218 | 0.0255 | 32.74 | 1.675 | 5.121  | 3.1331 | 0.01082  | 0.02421  | -0.01228 | 0.00345  | 0.00773  | -0.00392 | 0.00446  | 0.00453  | 0.00333 |
| 10266 | 1889.42 | 123.8 | 3.51 | 0.23  | 0.0241 | 0.0259 | 32.86 | 1.676 | 5.237  | 3.1378 | 0.01010  | 0.02439  | -0.01353 | 0.00322  | 0.00777  | -0.00431 | 0.00422  | 0.00458  | 0.00294 |
| 10267 | 1887.84 | 123.9 | 3.51 | 0.24  | 0.0272 | 0.0229 | 32.99 | 1.676 | 5.355  | 3.1341 | 0.01059  | 0.02416  | -0.01319 | 0.00338  | 0.00771  | -0.00421 | 0.00438  | 0.00452  | 0.00305 |
| 10268 | 1888.99 | 123.7 | 3.51 | 0.23  | 0.0221 | 0.0294 | 33.12 | 1.676 | 5.493  | 3.1380 | 0.00658  | 0.02365  | -0.01469 | 0.00210  | 0.00754  | -0.00468 | 0.00310  | 0.00434  | 0.00257 |
| 10269 | 1888.13 | 123.9 | 3.51 | 0.23  | 0.0235 | 0.0264 | 33.24 | 1.676 | 5.616  | 3.1352 | 0.00973  | 0.02395  | -0.01359 | 0.00310  | 0.00764  | -0.00434 | 0.00411  | 0.00445  | 0.00292 |
| 10270 | 1888.99 | 123.9 | 3.51 | 0.23  | 0.0241 | 0.0268 | 33.36 | 1.676 | 5.735  | 3.1369 | 0.00860  | 0.02407  | -0.01087 | 0.00274  | 0.00767  | -0.00346 | 0.00375  | 0.00448  | 0.00379 |
| 10271 | 1887.98 | 124.1 | 3.51 | 0.23  | 0.0224 | 0.0352 | 33.49 | 1.676 | 5.863  | 3.1344 | 0.01034  | 0.02392  | -0.00971 | 0.00330  | 0.00763  | -0.00310 | 0.00430  | 0.00444  | 0.00416 |
| 10272 | 1886.40 | 124.3 | 3.50 | 0.23  | 0.0217 | 0.0358 | 33.62 | 1.676 | 5.993  | 3.1334 | 0.00788  | 0.02539  | -0.00783 | 0.00251  | 0.00810  | -0.00250 | 0.00352  | 0.00491  | 0.00475 |
| 10273 | 1889.14 | 124.1 | 3.51 | 0.23  | 0.0224 | 0.0342 | 33.74 | 1.676 | 6.116  | 3.1381 | 0.00818  | 0.02624  | -0.01028 | 0.00261  | 0.00836  | -0.00328 | 0.00361  | 0.00517  | 0.00398 |
| 10274 | 1885.54 | 124.3 | 3.50 | 0.23  | 0.0225 | 0.0306 | 33.87 | 1.676 | 6.241  | 3.1309 | 0.01139  | 0.02657  | -0.00999 | 0.00364  | 0.00849  | -0.00319 | 0.00464  | 0.00529  | 0.00406 |
| 10275 | 1889.42 | 123.8 | 3.51 | 0.24  | 0.0238 | 0.0257 | 33.99 | 1.676 | 6.356  | 3.1375 | 0.01090  | 0.02832  | -0.01104 | 0.00348  | 0.00903  | -0.00352 | 0.00448  | 0.00583  | 0.00374 |
| 10276 | 1886.98 | 124.0 | 3.51 | 0.24  | 0.0255 | 0.0210 | 34.11 | 1.676 | 6.479  | 3.1328 | 0.01051  | 0.02801  | -0.01035 | 0.00336  | 0.00894  | -0.00330 | 0.00436  | 0.00575  | 0.00395 |
| 10277 | 1889.57 | 123.8 | 3.51 | 0.24  | 0.0300 | 0.0160 | 34.24 | 1.677 | 6.595  | 3.1377 | 0.01298  | 0.03140  | -0.01019 | 0.00414  | 0.01001  | -0.00325 | 0.00514  | 0.00681  | 0.00401 |
| 10278 | 1887.55 | 124.1 | 3.51 | 0.23  | 0.0252 | 0.0246 | 34.36 | 1.676 | 6.733  | 3.1340 | 0.01184  | 0.03037  | -0.01171 | 0.00378  | 0.00969  | -0.00374 | 0.00478  | 0.00650  | 0.00352 |
| 10279 | 1888.85 | 123.9 | 3.51 | 0.23  | 0.0234 | 0.0264 | 34.49 | 1.676 | 6.863  | 3.1374 | 0.01249  | 0.02946  | -0.01387 | 0.00398  | 0.00939  | -0.00442 | 0.00499  | 0.00620  | 0.00284 |
| 10280 | 1889.14 | 123.9 | 3.51 | 0.23  | 0.0245 | 0.0260 | 34.61 | 1.676 | 6.985  | 3.1371 | 0.01380  | 0.03002  | -0.01165 | 0.00440  | 0.00957  | -0.00371 | 0.00540  | 0.00638  | 0.00354 |
| 10281 | 1888.42 | 123.7 | 3.51 | 0.24  | 0.0245 | 0.0233 | 34.74 | 1.676 | 7.108  | 3.1362 | 0.01339  | 0.03028  | -0.01102 | 0.00427  | 0.00966  | -0.00351 | 0.00527  | 0.00646  | 0.00374 |
| 10282 | 1888.56 | 124.1 | 3.51 | 0.24  | 0.0265 | 0.0235 | 34.87 | 1.676 | 7.231  | 3.1351 | 0.01551  | 0.03189  | -0.00941 | 0.00495  | 0.01017  | -0.00300 | 0.00595  | 0.00698  | 0.00425 |
| 10283 | 1888.42 | 124.0 | 3.51 | 0.23  | 0.0235 | 0.0264 | 34.99 | 1.676 | 7.362  | 3.1367 | 0.01327  | 0.03215  | -0.00885 | 0.00423  | 0.01025  | -0.00282 | 0.00524  | 0.00705  | 0.00443 |
| 10284 | 1888.70 | 124.1 | 3.51 | 0.24  | 0.0241 | 0.0268 | 35.12 | 1.676 | 7.484  | 3.1370 | 0.01332  | 0.03131  | -0.00930 | 0.00425  | 0.00998  | -0.00297 | 0.00525  | 0.00678  | 0.00429 |
| 10285 | 1888.27 | 124.0 | 3.51 | 0.23  | 0.0214 | 0.0318 | 35.24 | 1.675 | 7.618  | 3.1365 | 0.01370  | 0.02787  | -0.00905 | 0.00437  | 0.00889  | -0.00289 | 0.00537  | 0.00569  | 0.00437 |
| 10286 | 1888.70 | 124.1 | 3.51 | 0.23  | 0.0228 | 0.0279 | 35.37 | 1.676 | 7.741  | 3.1361 | 0.01417  | 0.02886  | -0.00750 | 0.00452  | 0.00920  | -0.00239 | 0.00552  | 0.00601  | 0.00486 |
| 10287 | 1888.27 | 124.2 | 3.51 | 0.23  | 0.0211 | 0.0279 | 35.49 | 1.676 | 7.867  | 3.1357 | 0.01277  | 0.02551  | -0.00796 | 0.00407  | 0.00813  | -0.00254 | 0.00508  | 0.00494  | 0.00472 |
| 10288 | 1888.85 | 124.3 | 3.51 | 0.23  | 0.0210 | 0.0325 | 35.61 | 1.676 | 7.989  | 3.1362 | 0.00995  | 0.02358  | -0.00673 | 0.00317  | 0.00752  | -0.00215 | 0.00418  | 0.00432  | 0.00511 |
| 10289 | 1887.26 | 124.2 | 3.51 | 0.23  | 0.0238 | 0.0266 | 35.74 | 1.676 | 8.110  | 3.1353 | 0.00753  | 0.02201  | -0.00723 | 0.00240  | 0.00702  | -0.00231 | 0.00341  | 0.00382  | 0.00495 |
| 10290 | 1889.28 | 124.1 | 3.51 | 0.24  | 0.0224 | 0.0268 | 35.87 | 1.676 | 8.236  | 3.1371 | 0.00593  | 0.02057  | -0.00627 | 0.00189  | 0.00656  | -0.00200 | 0.00290  | 0.00336  | 0.00526 |
| 10291 | 1887.84 | 124.0 | 3.51 | 0.23  | 0.0218 | 0.0218 | 35.99 | 1.676 | 8.367  | 3.1351 | 0.00381  | 0.01735  | -0.00496 | 0.00121  | 0.00553  | -0.00158 | 0.00222  | 0.00234  | 0.00567 |
| 10292 | 1888.99 | 124.1 | 3.51 | 0.23  | 0.0200 | 0.0310 | 36.12 | 1.675 | 8.494  | 3.1366 | 0.00341  | 0.01858  | -0.00636 | 0.00109  | 0.00592  | -0.00203 | 0.00209  | 0.00273  | 0.00523 |
| 10293 | 1886.26 | 124.3 | 3.50 | 0.21  | 0.0176 | 0.0270 | 36.24 | 1.675 | 8.633  | 3.1332 | -0.00041 | 0.01262  | -0.00684 | -0.00013 | 0.00403  | -0.00218 | 0.00087  | 0.00083  | 0.00507 |
| 10294 | 1889.42 | 124.1 | 3.51 | 0.22  | 0.0217 | 0.0301 | 36.37 | 1.675 | 8.749  | 3.1376 | -0.00076 | 0.00954  | -0.00721 | -0.00024 | 0.00304  | -0.00230 | 0.00076  | -0.00016 | 0.00496 |
| 10295 | 1885.39 | 124.3 | 3.50 | 0.21  | 0.0163 | 0.0328 | 36.49 | 1.674 | 8.888  | 3.1317 | -0.00391 | 0.00543  | -0.00935 | -0.00125 | 0.00173  | -0.00299 | -0.00024 | -0.00146 | 0.00427 |
| 10296 | 1889.71 | 124.0 | 3.51 | 0.22  | 0.0210 | 0.0297 | 36.62 | 1.675 | 8.998  | 3.1377 | -0.00714 | -0.00124 | -0.01025 | -0.00228 | -0.00039 | -0.00327 | -0.00127 | -0.00359 | 0.00399 |
| 10297 | 1885.25 | 124.3 | 3.50 | 0.23  | 0.0204 | 0.0294 | 36.74 | 1.675 | 9.121  | 3.1309 | -0.01154 | -0.00475 | -0.01190 | -0.00369 | -0.00152 | -0.00380 | -0.00268 | -0.00471 | 0.00345 |
| 10298 | 1890.00 | 124.2 | 3.51 | 0.22  | 0.0176 | 0.0325 | 36.87 | 1.675 | 9.253  | 3.1387 | -0.01526 | -0.00798 | -0.01358 | -0.00486 | -0.00254 | -0.00433 | -0.00386 | -0.00574 | 0.00293 |
| 10299 | 1885.97 | 124.4 | 3.50 | 0.23  | 0.0152 | 0.0359 | 36.99 | 1.675 | 9.377  | 3.1308 | -0.01881 | -0.01073 | -0.01621 | -0.00601 | -0.00343 | -0.00518 | -0.00500 | -0.00662 | 0.00208 |
| 10300 | 1889.42 | 123.9 | 3.51 | 0.22  | 0.0162 | 0.0308 | 37.12 | 1.675 | 9.504  | 3.1372 | -0.02135 | -0.01310 | -0.01932 | -0.      |          |          |          |          |         |

Table A17. Concluded.

Run = 150

M = 1.60

xsppos = 44.353

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02     | dp03     | dpp01    | dpp02    | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 10320 | 1887.41 | 124.1 | 3.51 | 0.23  | 0.0190 | 0.0342 | 39.62 | 1.676 | 11.992 | 3.1348 | -0.00720 | 0.00886  | -0.04185 | -0.00230 | 0.00283  | -0.01335 | -0.00129 | -0.00037 | -0.00609 |
| 10321 | 1889.71 | 124.0 | 3.51 | 0.23  | 0.0193 | 0.0372 | 39.74 | 1.676 | 12.116 | 3.1393 | -0.00715 | 0.00756  | -0.03964 | -0.00228 | 0.00241  | -0.01263 | -0.00127 | -0.00079 | -0.00537 |
| 10322 | 1884.96 | 124.4 | 3.50 | 0.23  | 0.0197 | 0.0356 | 39.86 | 1.676 | 12.239 | 3.1303 | -0.00425 | 0.00923  | -0.03413 | -0.00136 | 0.00295  | -0.01090 | -0.00035 | -0.00025 | -0.00365 |
| 10323 | 1889.71 | 124.0 | 3.51 | 0.24  | 0.0207 | 0.0342 | 39.99 | 1.676 | 12.360 | 3.1383 | -0.00311 | 0.00861  | -0.03068 | -0.00099 | 0.00274  | -0.00978 | 0.00001  | -0.00045 | -0.00252 |
| 10324 | 1884.96 | 124.4 | 3.50 | 0.23  | 0.0190 | 0.0408 | 40.11 | 1.676 | 12.490 | 3.1297 | -0.00271 | 0.00916  | -0.02891 | -0.00087 | 0.00293  | -0.00924 | 0.00014  | -0.00027 | -0.00198 |
| 10325 | 1889.57 | 124.0 | 3.51 | 0.24  | 0.0190 | 0.0351 | 40.24 | 1.676 | 12.613 | 3.1376 | -0.00145 | 0.00879  | -0.02834 | -0.00046 | 0.00280  | -0.00903 | 0.00054  | -0.00039 | -0.00178 |
| 10326 | 1885.68 | 124.5 | 3.50 | 0.25  | 0.0259 | 0.0306 | 40.37 | 1.677 | 12.724 | 3.1309 | -0.00301 | 0.00595  | -0.02949 | -0.00096 | 0.00190  | -0.00942 | 0.00004  | -0.00129 | -0.00216 |
| 10327 | 1889.86 | 123.9 | 3.51 | 0.24  | 0.0234 | 0.0338 | 40.49 | 1.676 | 12.859 | 3.1387 | -0.00510 | 0.00442  | -0.02856 | -0.00163 | 0.00141  | -0.00910 | -0.00062 | -0.00179 | -0.00184 |
| 10328 | 1885.39 | 124.4 | 3.50 | 0.24  | 0.0190 | 0.0343 | 40.62 | 1.676 | 12.989 | 3.1309 | -0.00695 | 0.00389  | -0.02766 | -0.00222 | 0.00124  | -0.00884 | -0.00122 | -0.00195 | -0.00158 |
| 10329 | 1890.29 | 123.9 | 3.51 | 0.23  | 0.0179 | 0.0373 | 40.74 | 1.676 | 13.119 | 3.1387 | -0.00628 | 0.00634  | -0.02671 | -0.00200 | 0.00098  | -0.00851 | -0.00100 | -0.00221 | -0.00126 |
| 10330 | 1884.96 | 124.3 | 3.50 | 0.23  | 0.0211 | 0.0363 | 40.86 | 1.676 | 13.237 | 3.1302 | -0.00948 | 0.00039  | -0.02827 | -0.00303 | 0.00012  | -0.00903 | -0.00202 | -0.00307 | -0.00178 |
| 10331 | 1890.00 | 123.8 | 3.51 | 0.24  | 0.0258 | 0.0305 | 40.99 | 1.676 | 13.354 | 3.1383 | -0.01044 | -0.00035 | -0.02830 | -0.00333 | -0.00011 | -0.00902 | -0.00232 | -0.00331 | -0.00176 |
| 10332 | 1885.54 | 124.0 | 3.50 | 0.24  | 0.0221 | 0.0341 | 41.11 | 1.676 | 13.480 | 3.1318 | -0.01227 | -0.00159 | -0.02850 | -0.00392 | -0.00051 | -0.00910 | -0.00291 | -0.00370 | -0.00185 |
| 10333 | 1888.99 | 123.9 | 3.51 | 0.23  | 0.0200 | 0.0366 | 41.24 | 1.676 | 13.615 | 3.1363 | -0.01087 | 0.00248  | -0.02582 | -0.00346 | 0.00079  | -0.00823 | -0.00246 | -0.00240 | -0.00098 |
| 10334 | 1885.10 | 124.1 | 3.50 | 0.23  | 0.0221 | 0.0322 | 41.36 | 1.676 | 13.739 | 3.1310 | -0.01094 | 0.00388  | -0.02710 | -0.00349 | 0.00124  | -0.00866 | -0.00249 | -0.00196 | -0.00140 |
| 10335 | 1889.42 | 123.8 | 3.51 | 0.24  | 0.0241 | 0.0286 | 41.49 | 1.676 | 13.854 | 3.1380 | -0.00904 | 0.00905  | -0.02662 | -0.00288 | 0.00289  | -0.00848 | -0.00188 | -0.00031 | -0.00123 |
| 10336 | 1884.67 | 124.1 | 3.50 | 0.23  | 0.0218 | 0.0349 | 41.62 | 1.676 | 13.987 | 3.1304 | -0.00483 | 0.01105  | -0.02715 | -0.00154 | 0.00353  | -0.00867 | -0.00054 | 0.00033  | -0.00142 |
| 10337 | 1889.57 | 123.9 | 3.51 | 0.24  | 0.0238 | 0.0257 | 41.74 | 1.676 | 14.107 | 3.1391 | -0.00405 | 0.00808  | -0.02821 | -0.00129 | 0.00258  | -0.00899 | -0.00028 | -0.00062 | -0.00173 |
| 10338 | 1885.25 | 124.1 | 3.50 | 0.24  | 0.0238 | 0.0276 | 41.87 | 1.676 | 14.234 | 3.1311 | -0.00276 | 0.00634  | -0.02941 | -0.00088 | 0.00202  | -0.00939 | 0.00012  | -0.00117 | -0.00214 |
| 10339 | 1889.14 | 123.8 | 3.51 | 0.23  | 0.0234 | 0.0292 | 41.99 | 1.676 | 14.363 | 3.1370 | -0.00396 | 0.00436  | -0.03056 | -0.00126 | 0.00139  | -0.00974 | -0.00026 | -0.00180 | -0.00249 |
| 10340 | 1885.82 | 124.0 | 3.50 | 0.24  | 0.0228 | 0.0279 | 42.12 | 1.676 | 14.486 | 3.1331 | -0.00912 | 0.00173  | -0.03258 | -0.00291 | 0.00055  | -0.01040 | -0.00191 | -0.00264 | -0.00314 |
| 10341 | 1889.28 | 123.8 | 3.51 | 0.23  | 0.0214 | 0.0355 | 42.24 | 1.676 | 14.616 | 3.1381 | -0.00945 | 0.00068  | -0.03179 | -0.00301 | 0.00022  | -0.01013 | -0.00201 | -0.00298 | -0.00287 |
| 10342 | 1886.26 | 124.1 | 3.50 | 0.23  | 0.0218 | 0.0274 | 42.37 | 1.676 | 14.738 | 3.1334 | -0.01075 | 0.00552  | -0.03015 | -0.00343 | 0.00176  | -0.00962 | -0.00243 | -0.00143 | -0.00237 |
| 10343 | 1888.70 | 124.0 | 3.51 | 0.24  | 0.0228 | 0.0344 | 42.49 | 1.676 | 14.862 | 3.1371 | -0.00899 | 0.00893  | -0.03017 | -0.00286 | 0.00285  | -0.00962 | -0.00186 | -0.00035 | -0.00236 |
| 10344 | 1885.97 | 124.2 | 3.50 | 0.23  | 0.0231 | 0.0319 | 42.62 | 1.676 | 14.989 | 3.1328 | -0.00377 | 0.01188  | -0.02381 | -0.00120 | 0.00379  | -0.00760 | -0.00020 | 0.00060  | -0.00035 |
| 10345 | 1889.28 | 124.1 | 3.51 | 0.24  | 0.0238 | 0.0313 | 42.74 | 1.676 | 15.107 | 3.1377 | -0.00116 | 0.01384  | -0.02308 | -0.00037 | 0.00441  | -0.00736 | 0.00063  | 0.00122  | -0.00010 |
| 10346 | 1886.40 | 124.3 | 3.50 | 0.23  | 0.0204 | 0.0369 | 42.86 | 1.675 | 15.243 | 3.1335 | 0.00033  | 0.01374  | -0.02331 | 0.00010  | 0.00438  | -0.00744 | 0.00111  | 0.00119  | -0.00018 |
| 10347 | 1888.85 | 124.0 | 3.51 | 0.24  | 0.0214 | 0.0355 | 42.99 | 1.676 | 15.359 | 3.1365 | 0.00245  | 0.01241  | -0.02582 | 0.00078  | 0.00396  | -0.00823 | 0.00179  | 0.00076  | -0.00098 |
| 10348 | 1887.70 | 124.0 | 3.51 | 0.24  | 0.0241 | 0.0315 | 43.11 | 1.676 | 15.475 | 3.1358 | 0.00020  | 0.01131  | -0.02960 | 0.00006  | 0.00361  | -0.00944 | 0.00107  | 0.00041  | -0.00218 |
| 10349 | 1888.70 | 124.2 | 3.51 | 0.24  | 0.0207 | 0.0361 | 43.24 | 1.676 | 15.609 | 3.1362 | 0.00034  | 0.01308  | -0.03022 | 0.00011  | 0.00417  | -0.00964 | 0.00111  | 0.00097  | -0.00238 |
| 10350 | 1886.83 | 124.1 | 3.51 | 0.24  | 0.0221 | 0.0350 | 43.36 | 1.676 | 15.733 | 3.1351 | -0.00129 | 0.00971  | -0.03194 | -0.00041 | 0.00310  | -0.01019 | 0.00059  | -0.00010 | -0.00293 |
| 10351 | 1888.99 | 124.1 | 3.51 | 0.24  | 0.0203 | 0.0368 | 43.49 | 1.676 | 15.861 | 3.1366 | 0.00027  | 0.01120  | -0.02845 | 0.00009  | 0.00357  | -0.00907 | 0.00109  | 0.00038  | -0.00182 |
| 10352 | 1887.84 | 124.2 | 3.51 | 0.24  | 0.0190 | 0.0417 | 43.62 | 1.676 | 15.987 | 3.1360 | -0.00209 | 0.00915  | -0.02339 | -0.00067 | 0.00292  | -0.00746 | 0.00034  | -0.00028 | -0.00020 |
| 10353 | 1888.70 | 124.2 | 3.51 | 0.24  | 0.0214 | 0.0365 | 43.74 | 1.676 | 16.108 | 3.1363 | -0.00145 | 0.01010  | -0.02052 | -0.00046 | 0.00322  | -0.00654 | 0.00054  | 0.00003  | 0.00071  |
| 10354 | 1886.98 | 124.2 | 3.51 | 0.24  | 0.0235 | 0.0330 | 43.87 | 1.676 | 16.232 | 3.1338 | -0.00110 | 0.01047  | -0.02060 | -0.00035 | 0.00334  | -0.00657 | 0.00066  | 0.00015  | 0.00068  |
| 10355 | 1889.57 | 124.3 | 3.51 | 0.23  | 0.0224 | 0.0333 | 43.99 | 1.676 | 16.363 | 3.1372 | -0.00171 | 0.00938  | -0.02021 | -0.00054 | 0.00299  | -0.00644 | 0.00046  | -0.00020 | 0.00081  |
| 10356 | 1887.12 | 124.1 | 3.51 | 0.24  | 0.0248 | 0.0291 | 44.12 | 1.676 | 16.482 | 3.1349 | -0.00287 | 0.01064  | -0.02059 | -0.00091 | 0.00340  | -0.00657 | 0.00009  | 0.00020  | 0.00069  |
| 10357 | 1889.28 | 124.2 | 3.51 | 0.24  | 0.0210 | 0.0316 | 44.24 | 1.676 | 16.611 | 3.1373 | -0.00186 | 0.01052  | -0.02124 | -0.00059 | 0.00335  | -0.00677 | 0.00041  | 0.00016  | 0.00048  |
| 10358 | 1886.98 | 124.2 | 3.50 | 0.23  | 0.0228 | 0.0298 | 44.37 | 1.676 | 16.739 | 3.1337 | -0.00299 | 0.01167  | -0.02152 | -0.00095 | 0.00372  | -0.00687 | 0.00005  | 0.00053  | 0.00039  |
| 10359 | 1889.28 | 124.2 | 3.51 | 0.24  | 0.0238 | 0.0294 | 44.49 | 1.676 | 16.861 | 3.1381 | -0.00270 | 0.00972  | -0.02238 | -0.00086 | 0.00310  | -0.00713 | 0.00015  | -0.00010 | 0.00012  |
| 10360 | 1884.96 | 124.3 | 3.50 | 0.25  | 0.0228 | 0.0326 | 44.62 | 1.677 | 16.976 | 3.1299 | -0.00133 | 0.01149  | -0.02151 | -0.00042 | 0.00367  | -0.00687 | 0.00058  | 0.00048  | 0.00038  |
| 10361 | 1889.71 | 124.0 | 3.51 | 0.24  | 0.0234 | 0.0292 | 44.74 | 1.676 | 17.104 | 3.1384 | -0.00193 | 0.01090  | -0.02345 | -0.00062 | 0.00347  | -0.00747 | 0.00039  | 0.00028  | -0.00022 |
| 10362 | 1885.10 | 124.2 | 3.50 | 0.24  | 0.0225 | 0.0278 | 44.87 | 1.676 | 17.234 | 3.1311 | -0.00216 | 0.01031  | -0.02265 | -0.00069 | 0.00329  | -0.00723 | 0.00031  | 0.00010  | 0.00002  |
| 10363 | 1889.71 | 123.8 | 3.51 | 0.24  | 0.0234 | 0.0264 | 44.99 | 1.676 | 17.362 | 3.1393 | -0.00381 | 0.00998  | -0.02515 | -0.00121 | 0.00318  | -0.00801 | -0.00021 | -0.00002 | -0.00076 |
| 10364 | 1886.11 | 124.1 | 3.50 | 0.24  | 0.0245 | 0.0280 | 45.12 | 1.676 | 17.476 | 3.1329 | -0.00253 | 0.01109  | -0.02369 | -0.00081 | 0.00354  | -0.00756 | 0.00020  | 0.00034  | -0.00031 |
| 10365 | 1889.71 | 123.9 | 3.51 | 0.23  | 0.0234 | 0.0264 | 45.24 | 1.676 | 17.613 | 3.1377 | -0.00110 | 0.00972  | -0.02227 | -0.00035 | 0.00310  | -0.00710 | 0.00065  | -0.00010 | 0.00016  |
| 10366 | 1884.82 | 124.2 | 3.50 | 0.25  | 0.0287 | 0.0200 | 45.37 | 1.677 | 17.720 | 3.1311 | -0.00231 | 0.00933  | -0.02374 | -0.00074 | 0.00298  | -0.00758 | 0.00027  | -0.00021 | -0.00033 |
| 10367 | 1889.57 | 123.7 | 3.51 | 0.24  | 0.0241 | 0.0268 | 45.49 | 1.676 | 17.857 | 3.1390 | -0.00291 | 0.01037  | -0.02487 | -0.00093 | 0.00330  | -0.00792 | 0.00008  | 0.00011  | -0.00067 |
| 10368 | 1885.39 | 124.1 | 3.50 | 0.23  | 0.0225 | 0.0268 | 45.62 | 1.676 | 17.987 | 3.1310 | -0.00199 | 0.00937  | -0.02402 | -0.00064 | 0.00299  | -0.00767 | 0.00037  | -0.00020 | -0.00042 |

Table A18. Run 160.

Run = 160  
M = 1.60  
xsppos = 42.350

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 11164 | 1888.27 | 124.3 | 3.51 | 0.28  | 0.0229 | 0.0313 | 21.36 | 1.680 | -6.331 | 3.1356 | -0.00901 | 0.03184 | -0.03338 | -0.00287 | 0.01015 | -0.01065 | -0.00024 | -0.00030 | -0.00023 |
| 11165 | 1888.42 | 124.3 | 3.51 | 0.25  | 0.0260 | 0.0320 | 21.49 | 1.679 | -6.188 | 3.1344 | -0.00810 | 0.03280 | -0.03205 | -0.00258 | 0.01046 | -0.01022 | 0.00005  | 0.00001  | 0.00019  |
| 11166 | 1887.55 | 124.6 | 3.50 | 0.25  | 0.0233 | 0.0296 | 21.61 | 1.678 | -6.059 | 3.1332 | -0.00686 | 0.03393 | -0.03245 | -0.00219 | 0.01083 | -0.01036 | 0.00044  | 0.00037  | 0.00006  |
| 11167 | 1888.27 | 124.2 | 3.51 | 0.25  | 0.0250 | 0.0277 | 21.74 | 1.679 | -5.936 | 3.1341 | -0.00872 | 0.03374 | -0.03219 | -0.00278 | 0.01077 | -0.01027 | -0.00015 | 0.00031  | 0.00014  |
| 11168 | 1888.42 | 124.4 | 3.51 | 0.25  | 0.0243 | 0.0264 | 21.86 | 1.679 | -5.811 | 3.1356 | -0.00858 | 0.03157 | -0.03314 | -0.00274 | 0.01007 | -0.01057 | -0.00010 | -0.00039 | -0.00015 |
| 11169 | 1888.13 | 124.2 | 3.51 | 0.25  | 0.0236 | 0.0251 | 21.99 | 1.679 | -5.689 | 3.1343 | -0.00889 | 0.03253 | -0.03363 | -0.00284 | 0.01038 | -0.01073 | -0.00020 | -0.00008 | -0.00032 |
| 11170 | 1886.69 | 124.4 | 3.50 | 0.26  | 0.0216 | 0.0221 | 22.11 | 1.679 | -5.567 | 3.1312 | -0.00817 | 0.03291 | -0.03337 | -0.00261 | 0.01051 | -0.01066 | 0.00002  | 0.00005  | -0.00024 |
| 11171 | 1888.56 | 124.2 | 3.51 | 0.25  | 0.0247 | 0.0164 | 22.24 | 1.678 | -5.435 | 3.1332 | -0.00637 | 0.03346 | -0.03168 | -0.00203 | 0.01068 | -0.01011 | 0.00060  | 0.00022  | 0.00030  |
| 11172 | 1887.26 | 124.7 | 3.50 | 0.25  | 0.0254 | 0.0168 | 22.36 | 1.678 | -5.312 | 3.1332 | -0.00890 | 0.03180 | -0.03333 | -0.00284 | 0.01015 | -0.01064 | -0.00021 | -0.00031 | -0.00022 |
| 11173 | 1888.56 | 124.1 | 3.51 | 0.26  | 0.0253 | 0.0195 | 22.49 | 1.679 | -5.193 | 3.1348 | -0.00835 | 0.03260 | -0.03269 | -0.00266 | 0.01040 | -0.01043 | -0.00003 | -0.00006 | -0.00001 |
| 11174 | 1888.13 | 124.2 | 3.51 | 0.24  | 0.0271 | 0.0177 | 22.61 | 1.678 | -5.060 | 3.1335 | -0.00903 | 0.03415 | -0.03218 | -0.00288 | 0.01090 | -0.01027 | -0.00025 | 0.00044  | 0.00014  |
| 11175 | 1888.70 | 124.1 | 3.51 | 0.25  | 0.0264 | 0.0182 | 22.74 | 1.679 | -4.939 | 3.1347 | -0.00852 | 0.03275 | -0.03386 | -0.00272 | 0.01045 | -0.01080 | -0.00009 | -0.00001 | -0.00039 |
| 11176 | 1888.42 | 124.1 | 3.51 | 0.25  | 0.0233 | 0.0315 | 22.86 | 1.678 | -4.809 | 3.1340 | -0.00885 | 0.03387 | -0.03327 | -0.00282 | 0.01081 | -0.01061 | -0.00019 | 0.00035  | -0.00020 |
| 11177 | 1886.83 | 124.4 | 3.50 | 0.25  | 0.0195 | 0.0303 | 22.99 | 1.678 | -4.676 | 3.1322 | -0.00862 | 0.03253 | -0.03239 | -0.00275 | 0.01039 | -0.01034 | -0.00012 | -0.00007 | 0.00007  |
| 11178 | 1888.27 | 124.1 | 3.51 | 0.25  | 0.0229 | 0.0341 | 23.12 | 1.678 | -4.553 | 3.1335 | -0.00855 | 0.03384 | -0.03383 | -0.00273 | 0.01080 | -0.01079 | -0.00009 | 0.00034  | -0.00038 |
| 11179 | 1887.41 | 124.1 | 3.51 | 0.24  | 0.0205 | 0.0356 | 23.24 | 1.678 | -4.424 | 3.1326 | -0.00858 | 0.03345 | -0.03164 | -0.00274 | 0.01068 | -0.01010 | -0.00011 | 0.00022  | 0.00031  |
| 11180 | 1888.27 | 123.9 | 3.51 | 0.25  | 0.0219 | 0.0344 | 23.36 | 1.678 | -4.303 | 3.1342 | -0.00697 | 0.03147 | -0.03363 | -0.00222 | 0.01004 | -0.01073 | 0.00041  | -0.00042 | -0.00032 |
| 11181 | 1887.26 | 124.4 | 3.50 | 0.25  | 0.0216 | 0.0305 | 23.49 | 1.678 | -4.178 | 3.1323 | -0.00904 | 0.03207 | -0.03217 | -0.00289 | 0.01024 | -0.01027 | -0.00025 | -0.00022 | 0.00014  |
| 11182 | 1888.56 | 124.2 | 3.51 | 0.25  | 0.0260 | 0.0246 | 23.61 | 1.678 | -4.058 | 3.1343 | -0.00798 | 0.03263 | -0.03345 | -0.00254 | 0.01041 | -0.01067 | 0.00009  | -0.00005 | -0.00026 |
| 11183 | 1887.98 | 124.2 | 3.51 | 0.24  | 0.0247 | 0.0276 | 23.74 | 1.678 | -3.928 | 3.1335 | -0.00752 | 0.03291 | -0.03355 | -0.00240 | 0.01050 | -0.01071 | 0.00023  | 0.00004  | -0.00029 |
| 11184 | 1888.13 | 124.2 | 3.51 | 0.25  | 0.0216 | 0.0324 | 23.86 | 1.678 | -3.804 | 3.1332 | -0.00808 | 0.03376 | -0.03176 | -0.00258 | 0.01078 | -0.01014 | 0.00006  | 0.00032  | 0.00028  |
| 11185 | 1888.13 | 124.4 | 3.51 | 0.24  | 0.0226 | 0.0339 | 23.99 | 1.678 | -3.676 | 3.1331 | -0.00786 | 0.03358 | -0.03357 | -0.00251 | 0.01072 | -0.01072 | 0.00012  | 0.00026  | -0.00030 |
| 11186 | 1888.56 | 124.2 | 3.51 | 0.24  | 0.0236 | 0.0326 | 24.12 | 1.678 | -3.551 | 3.1348 | -0.00861 | 0.03230 | -0.03270 | -0.00275 | 0.01030 | -0.01043 | -0.00011 | -0.00015 | -0.00002 |
| 11187 | 1887.70 | 124.5 | 3.50 | 0.24  | 0.0216 | 0.0370 | 24.24 | 1.678 | -3.421 | 3.1331 | -0.00807 | 0.03332 | -0.03299 | -0.00258 | 0.01064 | -0.01053 | 0.00006  | 0.00018  | -0.00011 |
| 11188 | 1888.56 | 124.3 | 3.51 | 0.25  | 0.0226 | 0.0357 | 24.36 | 1.678 | -3.306 | 3.1350 | -0.00871 | 0.03393 | -0.03239 | -0.00278 | 0.01082 | -0.01033 | -0.00015 | 0.00037  | 0.00008  |
| 11189 | 1887.55 | 124.3 | 3.51 | 0.24  | 0.0219 | 0.0400 | 24.49 | 1.678 | -3.173 | 3.1320 | -0.00725 | 0.03651 | -0.03194 | -0.00231 | 0.01166 | -0.01020 | 0.00032  | 0.00120  | 0.00021  |
| 11190 | 1888.70 | 124.1 | 3.51 | 0.25  | 0.0226 | 0.0385 | 24.61 | 1.678 | -3.054 | 3.1355 | -0.00694 | 0.03654 | -0.03269 | -0.00221 | 0.01165 | -0.01043 | 0.00042  | 0.00120  | -0.00001 |
| 11191 | 1887.55 | 124.5 | 3.50 | 0.25  | 0.0236 | 0.0326 | 24.74 | 1.679 | -2.935 | 3.1328 | -0.00606 | 0.03376 | -0.03296 | -0.00193 | 0.01078 | -0.01052 | 0.00070  | 0.00032  | -0.00011 |
| 11192 | 1888.70 | 124.4 | 3.51 | 0.24  | 0.0216 | 0.0352 | 24.86 | 1.678 | -2.802 | 3.1347 | -0.00516 | 0.03268 | -0.03313 | -0.00165 | 0.01042 | -0.01057 | 0.00099  | -0.00003 | -0.00015 |
| 11193 | 1887.98 | 124.4 | 3.51 | 0.24  | 0.0229 | 0.0331 | 24.99 | 1.678 | -2.679 | 3.1345 | -0.00821 | 0.03108 | -0.03363 | -0.00262 | 0.00992 | -0.01073 | 0.00001  | -0.00054 | -0.00032 |
| 11194 | 1888.56 | 124.4 | 3.51 | 0.25  | 0.0202 | 0.0381 | 25.12 | 1.678 | -2.552 | 3.1348 | -0.01052 | 0.03026 | -0.03233 | -0.00336 | 0.00965 | -0.01031 | -0.00072 | -0.00080 | 0.00010  |
| 11195 | 1888.42 | 124.3 | 3.51 | 0.25  | 0.0205 | 0.0383 | 25.24 | 1.678 | -2.426 | 3.1334 | -0.00942 | 0.03299 | -0.03192 | -0.00301 | 0.01053 | -0.01019 | -0.00037 | 0.00007  | 0.00023  |
| 11196 | 1887.55 | 124.4 | 3.50 | 0.26  | 0.0243 | 0.0311 | 25.37 | 1.679 | -2.318 | 3.1338 | -0.01012 | 0.03509 | -0.03323 | -0.00323 | 0.01120 | -0.01060 | -0.00060 | 0.00074  | -0.00019 |
| 11197 | 1888.85 | 124.0 | 3.51 | 0.25  | 0.0167 | 0.0372 | 25.49 | 1.678 | -2.172 | 3.1342 | -0.00770 | 0.03871 | -0.03197 | -0.00246 | 0.01235 | -0.01020 | 0.00018  | 0.00189  | 0.00021  |
| 11198 | 1886.69 | 124.4 | 3.50 | 0.25  | 0.0192 | 0.0348 | 25.62 | 1.678 | -2.056 | 3.1322 | -0.00531 | 0.04075 | -0.03295 | -0.00169 | 0.01301 | -0.01052 | 0.00094  | 0.00255  | -0.00011 |
| 11199 | 1888.56 | 124.0 | 3.51 | 0.25  | 0.0174 | 0.0357 | 25.74 | 1.678 | -1.929 | 3.1345 | -0.00110 | 0.03992 | -0.03028 | -0.00035 | 0.01274 | -0.00966 | 0.00228  | 0.00228  | 0.00075  |
| 11200 | 1886.83 | 124.3 | 3.50 | 0.25  | 0.0233 | 0.0296 | 25.86 | 1.679 | -1.812 | 3.1316 | -0.00152 | 0.03899 | -0.02887 | -0.00049 | 0.01245 | -0.00922 | 0.00215  | 0.00199  | 0.00120  |
| 11201 | 1888.56 | 123.9 | 3.51 | 0.25  | 0.0253 | 0.0270 | 25.99 | 1.679 | -1.686 | 3.1342 | -0.00141 | 0.03679 | -0.03014 | -0.00045 | 0.01174 | -0.00962 | 0.00218  | 0.00128  | 0.00080  |
| 11202 | 1887.26 | 124.2 | 3.51 | 0.24  | 0.0171 | 0.0355 | 26.11 | 1.678 | -1.544 | 3.1329 | -0.00659 | 0.03074 | -0.03231 | -0.00210 | 0.00981 | -0.01031 | 0.00053  | -0.00064 | 0.00010  |
| 11203 | 1888.27 | 124.0 | 3.51 | 0.26  | 0.0209 | 0.0348 | 26.24 | 1.679 | -1.438 | 3.1341 | -0.00810 | 0.02992 | -0.03291 | -0.00259 | 0.00955 | -0.01050 | 0.00005  | -0.00091 | -0.00009 |
| 11204 | 1887.12 | 124.2 | 3.51 | 0.24  | 0.0178 | 0.0303 | 26.36 | 1.678 | -1.300 | 3.1323 | -0.01142 | 0.02985 | -0.03300 | -0.00365 | 0.00953 | -0.01054 | -0.00101 | -0.00093 | -0.00012 |
| 11205 | 1888.27 | 124.1 | 3.51 | 0.25  | 0.0216 | 0.0314 | 26.49 | 1.678 | -1.180 | 3.1335 | -0.01111 | 0.03426 | -0.03424 | -0.00355 | 0.01093 | -0.01093 | -0.00091 | 0.00048  | -0.00051 |
| 11206 | 1887.41 | 124.3 | 3.50 | 0.24  | 0.0185 | 0.0344 | 26.61 | 1.678 | -1.048 | 3.1328 | -0.01068 | 0.04001 | -0.03083 | -0.00341 | 0.01277 | -0.00984 | -0.00078 | 0.00231  | 0.00057  |
| 11207 | 1888.85 | 124.1 | 3.51 | 0.24  | 0.0185 | 0.0307 | 26.74 | 1.678 | -0.923 | 3.1345 | -0.00601 | 0.04343 | -0.02799 | -0.00192 | 0.01385 | -0.00893 | 0.00072  | 0.00340  | 0.00148  |
| 11208 | 1887.26 | 124.4 | 3.50 | 0.25  | 0.0185 | 0.0316 | 26.86 | 1.678 | -0.806 | 3.1319 | -0.00147 | 0.04380 | -0.02598 | -0.00047 | 0.01398 | -0.00829 | 0.00216  | 0.00353  | 0.00212  |
| 11209 | 1888.13 | 124.1 | 3.51 | 0.24  | 0.0188 | 0.0365 | 26.99 | 1.678 | -0.672 | 3.1335 | -0.00287 | 0.04037 | -0.02424 | 0.00092  | 0.01288 | -0.00774 | 0.00355  | 0.00243  | 0.00268  |
| 11210 | 1887.84 | 124.4 | 3.51 | 0.24  | 0.0157 | 0.0404 | 27.11 | 1.678 | -0.544 | 3.1322 | -0.00033 | 0.03812 | -0.02579 | 0.00011  | 0.01217 | -0.00823 | 0.00274  | 0.00171  | 0.00218  |
| 11211 | 1888.42 | 124.1 | 3.51 | 0.25  | 0.0188 | 0.0374 | 27.24 | 1.678 | -0.428 | 3.1343 | -0.00007 | 0.03570 | -0.02773 | -0.00002 | 0.01139 | -0.00885 | 0.00261  | 0.00093  | 0.00156  |
| 11212 | 1887.55 | 124.4 | 3.50 | 0.24  | 0.0233 | 0.0296 | 27.37 | 1.678 | -0.303 | 3.1328 | -0.00506 | 0.03126 | -0.03181 | -0.00161 | 0.00998 | -0.01015 | 0.01002  | -0.00048 | 0.00026  |
| 11213 | 1888.13 | 124.6 | 3.50 | 0.25  | 0.0209 | 0.0339 | 27.36 | 1.678 | -0.307 | 3.1340 | -0.00584 | 0.03113 | -0.03148 | -0.00186 | 0.00993 | -0.01004 | 0.00077  | -0.00052 | 0.00037  |
| 11214 | 1888.13 | 124.4 | 3.51 | 0.25  | 0.0188 | 0.0374 | 27.49 | 1.678 | -0.180 | 3.1334 | -0.00712 | 0.03115 | -0.03353 | -0.00227 | 0.00994 | -0.01070 | 0.00036  | -0.00051 | -0.00029 |
| 11215 | 1887.84 | 124.5 | 3.50 | 0.24  | 0.0209 | 0.0329 | 27.61 | 1.678 | -0.050 | 3.1334 | -0.01010 | 0.03517 | -0.03532 | -0.00322 | 0.01123 | -0.01127 | -0.00059 | 0.00077  | -0.00086 |
| 11216 | 1888.56 | 124.1 | 3.51 | 0.25  | 0.0202 | 0.0325 | 27.74 | 1.678 | 0.068  | 3.1345 | -0.01067 | 0.03820 | -0.03246 | -0.00340 | 0.01219 | -0.01036 | -0.00077 | 0.00173  | 0.00006  |
| 11217 | 1887.12 | 124.3 | 3.50 | 0.24  | 0.0216 | 0.0324 | 27.86 | 1.678 | 0.197  | 3.1332 | -0.00698 | 0.04172 | -0.02796 |          |         |          |          |          |          |

Table A18. Continued.

Run = 160  
M = 1.60  
xsppos = 42.349

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c  |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|---------|
| 11237 | 1888.13 | 124.2 | 3.51 | 0.24  | 0.0247 | 0.0294 | 30.36 | 1.678 | 2.695  | 3.1339 | -0.00016 | 0.04204 | -0.01923 | -0.00005 | 0.01342 | -0.00614 | 0.00258  | 0.00296  | 0.00428 |
| 11238 | 1888.56 | 124.1 | 3.51 | 0.24  | 0.0202 | 0.0316 | 30.49 | 1.678 | 2.825  | 3.1338 | -0.00024 | 0.04257 | -0.02133 | -0.00008 | 0.01358 | -0.00681 | 0.00256  | 0.00313  | 0.00361 |
| 11239 | 1888.13 | 124.1 | 3.51 | 0.24  | 0.0222 | 0.0337 | 30.72 | 1.678 | 3.054  | 3.1326 | 0.00147  | 0.04408 | -0.02126 | 0.00047  | 0.01407 | -0.00679 | 0.00310  | 0.00361  | 0.00363 |
| 11240 | 1886.83 | 124.4 | 3.50 | 0.24  | 0.0219 | 0.0326 | 30.74 | 1.678 | 3.077  | 3.1321 | 0.00047  | 0.04080 | -0.02176 | 0.00015  | 0.01303 | -0.00695 | 0.00278  | 0.00257  | 0.00347 |
| 11241 | 1887.98 | 124.1 | 3.51 | 0.25  | 0.0233 | 0.0315 | 30.87 | 1.678 | 3.196  | 3.1338 | 0.00043  | 0.04269 | -0.02145 | 0.00014  | 0.01362 | -0.00684 | 0.00277  | 0.00317  | 0.00357 |
| 11242 | 1886.83 | 124.4 | 3.50 | 0.24  | 0.0240 | 0.0347 | 30.99 | 1.678 | 3.323  | 3.1324 | 0.00062  | 0.04316 | -0.02326 | 0.00020  | 0.01378 | -0.00742 | 0.00283  | 0.00332  | 0.00299 |
| 11243 | 1887.98 | 124.2 | 3.51 | 0.25  | 0.0229 | 0.0331 | 31.12 | 1.678 | 3.445  | 3.1338 | 0.00241  | 0.04357 | -0.02099 | 0.00077  | 0.01390 | -0.00670 | 0.00340  | 0.00345  | 0.00372 |
| 11244 | 1886.69 | 124.4 | 3.50 | 0.25  | 0.0240 | 0.0347 | 31.24 | 1.678 | 3.568  | 3.1319 | 0.00113  | 0.04386 | -0.02169 | 0.00036  | 0.01400 | -0.00692 | 0.00299  | 0.00355  | 0.00349 |
| 11245 | 1888.27 | 124.1 | 3.51 | 0.24  | 0.0284 | 0.0287 | 31.36 | 1.678 | 3.692  | 3.1339 | 0.00183  | 0.04575 | -0.02196 | 0.00058  | 0.01460 | -0.00701 | 0.00322  | 0.00414  | 0.00341 |
| 11246 | 1887.70 | 124.4 | 3.50 | 0.25  | 0.0219 | 0.0410 | 31.49 | 1.678 | 3.819  | 3.1333 | 0.00287  | 0.04460 | -0.02225 | 0.00091  | 0.01424 | -0.00710 | 0.00355  | 0.00378  | 0.00331 |
| 11247 | 1888.27 | 124.0 | 3.51 | 0.25  | 0.0264 | 0.0387 | 31.62 | 1.679 | 3.942  | 3.1345 | 0.00246  | 0.04346 | -0.02378 | 0.00079  | 0.01387 | -0.00759 | 0.00342  | 0.00341  | 0.00283 |
| 11248 | 1886.83 | 124.2 | 3.50 | 0.24  | 0.0233 | 0.0380 | 31.74 | 1.678 | 4.073  | 3.1326 | 0.00265  | 0.04227 | -0.02414 | 0.00085  | 0.01349 | -0.00771 | 0.00348  | 0.00304  | 0.00271 |
| 11249 | 1888.56 | 124.0 | 3.51 | 0.25  | 0.0274 | 0.0328 | 31.86 | 1.678 | 4.192  | 3.1349 | 0.00268  | 0.04121 | -0.02326 | 0.00086  | 0.01315 | -0.00742 | 0.00349  | 0.00269  | 0.00299 |
| 11250 | 1886.98 | 124.3 | 3.50 | 0.25  | 0.0281 | 0.0257 | 31.99 | 1.679 | 4.313  | 3.1322 | 0.00136  | 0.04212 | -0.02325 | 0.00043  | 0.01345 | -0.00742 | 0.00307  | 0.00299  | 0.00299 |
| 11251 | 1888.13 | 124.0 | 3.51 | 0.25  | 0.0295 | 0.0255 | 32.12 | 1.679 | 4.439  | 3.1340 | -0.00035 | 0.04560 | -0.02145 | -0.00011 | 0.01455 | -0.00684 | 0.00252  | 0.00409  | 0.00357 |
| 11252 | 1886.98 | 124.0 | 3.50 | 0.25  | 0.0284 | 0.0241 | 32.24 | 1.679 | 4.564  | 3.1319 | 0.00221  | 0.04630 | -0.02059 | 0.00071  | 0.01478 | -0.00657 | 0.00334  | 0.00433  | 0.00384 |
| 11253 | 1888.56 | 123.9 | 3.51 | 0.25  | 0.0291 | 0.0263 | 32.36 | 1.679 | 4.686  | 3.1342 | 0.00413  | 0.04801 | -0.01943 | 0.00132  | 0.01532 | -0.00620 | 0.00395  | 0.00486  | 0.00421 |
| 11254 | 1886.98 | 124.2 | 3.51 | 0.25  | 0.0229 | 0.0332 | 32.49 | 1.678 | 4.823  | 3.1312 | 0.00569  | 0.04851 | -0.01751 | 0.00182  | 0.01549 | -0.00559 | 0.00445  | 0.00504  | 0.00482 |
| 11255 | 1888.42 | 123.9 | 3.51 | 0.25  | 0.0291 | 0.0272 | 32.61 | 1.679 | 4.938  | 3.1343 | 0.00722  | 0.04788 | -0.01784 | 0.00230  | 0.01528 | -0.00569 | 0.00494  | 0.00482  | 0.00472 |
| 11256 | 1886.69 | 124.4 | 3.50 | 0.24  | 0.0243 | 0.0330 | 32.74 | 1.678 | 5.073  | 3.1324 | 0.00614  | 0.04503 | -0.02017 | 0.00196  | 0.01438 | -0.00644 | 0.00459  | 0.00392  | 0.00398 |
| 11257 | 1888.13 | 124.3 | 3.51 | 0.25  | 0.0305 | 0.0252 | 32.87 | 1.679 | 5.189  | 3.1336 | 0.00566  | 0.04691 | -0.01994 | 0.00181  | 0.01497 | -0.00636 | 0.00444  | 0.00451  | 0.00405 |
| 11258 | 1887.41 | 124.5 | 3.50 | 0.25  | 0.0288 | 0.0298 | 32.99 | 1.679 | 5.313  | 3.1323 | 0.00391  | 0.04499 | -0.01898 | 0.00125  | 0.01436 | -0.00606 | 0.00388  | 0.00390  | 0.00435 |
| 11259 | 1888.13 | 124.1 | 3.51 | 0.25  | 0.0308 | 0.0282 | 33.11 | 1.679 | 5.436  | 3.1345 | 0.00353  | 0.04489 | -0.02209 | 0.00113  | 0.01432 | -0.00705 | 0.00376  | 0.00386  | 0.00337 |
| 11260 | 1887.70 | 124.3 | 3.51 | 0.25  | 0.0264 | 0.0332 | 33.24 | 1.678 | 5.567  | 3.1329 | 0.00340  | 0.04441 | -0.02045 | 0.00108  | 0.01418 | -0.00653 | 0.00372  | 0.00372  | 0.00389 |
| 11261 | 1888.56 | 124.2 | 3.51 | 0.24  | 0.0277 | 0.0292 | 33.36 | 1.678 | 5.693  | 3.1345 | 0.00485  | 0.04420 | -0.01822 | 0.00155  | 0.01410 | -0.00581 | 0.00418  | 0.00365  | 0.00460 |
| 11262 | 1887.41 | 124.4 | 3.50 | 0.24  | 0.0250 | 0.0371 | 33.49 | 1.678 | 5.822  | 3.1332 | 0.00379  | 0.04295 | -0.01696 | 0.00121  | 0.01371 | -0.00541 | 0.00384  | 0.00325  | 0.00500 |
| 11263 | 1888.27 | 124.0 | 3.51 | 0.24  | 0.0246 | 0.0341 | 33.61 | 1.678 | 5.948  | 3.1337 | 0.00421  | 0.04547 | -0.01539 | 0.00134  | 0.01451 | -0.00491 | 0.00398  | 0.00405  | 0.00550 |
| 11264 | 1887.55 | 124.4 | 3.50 | 0.24  | 0.0229 | 0.0331 | 33.74 | 1.678 | 6.075  | 3.1319 | 0.00371  | 0.04730 | -0.01313 | 0.00118  | 0.01510 | -0.00419 | 0.00382  | 0.00465  | 0.00622 |
| 11265 | 1888.70 | 124.1 | 3.51 | 0.24  | 0.0205 | 0.0374 | 33.86 | 1.678 | 6.202  | 3.1342 | 0.00541  | 0.04741 | -0.01529 | 0.00172  | 0.01513 | -0.00488 | 0.00436  | 0.00467  | 0.00553 |
| 11266 | 1887.84 | 124.4 | 3.51 | 0.24  | 0.0246 | 0.0331 | 33.99 | 1.678 | 6.323  | 3.1321 | 0.00690  | 0.05032 | -0.01498 | 0.00220  | 0.01607 | -0.00478 | 0.00484  | 0.00561  | 0.00563 |
| 11267 | 1888.70 | 124.0 | 3.51 | 0.24  | 0.0195 | 0.0368 | 34.11 | 1.678 | 6.456  | 3.1338 | 0.00712  | 0.04749 | -0.01704 | 0.00227  | 0.01515 | -0.00544 | 0.00490  | 0.00470  | 0.00498 |
| 11268 | 1887.98 | 124.2 | 3.51 | 0.23  | 0.0198 | 0.0352 | 34.24 | 1.677 | 6.585  | 3.1333 | 0.00785  | 0.04808 | -0.01650 | 0.00251  | 0.01535 | -0.00527 | 0.00514  | 0.00489  | 0.00515 |
| 11269 | 1888.27 | 124.1 | 3.51 | 0.23  | 0.0188 | 0.0346 | 34.36 | 1.677 | 6.709  | 3.1352 | 0.00715  | 0.04786 | -0.01843 | 0.00228  | 0.01526 | -0.00588 | 0.00491  | 0.00481  | 0.00454 |
| 11270 | 1888.42 | 124.3 | 3.51 | 0.24  | 0.0212 | 0.0350 | 34.49 | 1.678 | 6.825  | 3.1337 | 0.00905  | 0.05112 | -0.01898 | 0.00289  | 0.01631 | -0.00606 | 0.00552  | 0.00586  | 0.00436 |
| 11271 | 1888.27 | 124.3 | 3.51 | 0.24  | 0.0212 | 0.0322 | 34.61 | 1.678 | 6.949  | 3.1349 | 0.00775  | 0.04974 | -0.02044 | 0.00247  | 0.01587 | -0.00652 | 0.00510  | 0.00541  | 0.00389 |
| 11272 | 1888.27 | 124.2 | 3.51 | 0.24  | 0.0212 | 0.0387 | 34.74 | 1.678 | 7.079  | 3.1324 | 0.00891  | 0.05143 | -0.01556 | 0.00284  | 0.01642 | -0.00497 | 0.00548  | 0.00596  | 0.00545 |
| 11273 | 1888.42 | 124.3 | 3.51 | 0.23  | 0.0191 | 0.0404 | 34.86 | 1.677 | 7.209  | 3.1345 | 0.00833  | 0.05146 | -0.01832 | 0.00266  | 0.01642 | -0.00584 | 0.00529  | 0.00596  | 0.00457 |
| 11274 | 1888.13 | 124.3 | 3.51 | 0.24  | 0.0205 | 0.0355 | 34.99 | 1.678 | 7.330  | 3.1341 | 0.00921  | 0.05083 | -0.01639 | 0.00294  | 0.01622 | -0.00523 | 0.00557  | 0.00576  | 0.00518 |
| 11275 | 1888.13 | 124.3 | 3.51 | 0.24  | 0.0192 | 0.0394 | 35.11 | 1.678 | 7.451  | 3.1341 | 0.01010  | 0.05005 | -0.01400 | 0.00322  | 0.01597 | -0.00447 | 0.00586  | 0.00551  | 0.00595 |
| 11276 | 1888.27 | 124.2 | 3.51 | 0.24  | 0.0192 | 0.0376 | 35.24 | 1.678 | 7.578  | 3.1333 | 0.01043  | 0.04938 | -0.01410 | 0.00333  | 0.01576 | -0.00450 | 0.00596  | 0.00530  | 0.00591 |
| 11277 | 1888.70 | 124.1 | 3.51 | 0.24  | 0.0202 | 0.0297 | 35.36 | 1.678 | 7.704  | 3.1350 | 0.00878  | 0.04496 | -0.01399 | 0.00280  | 0.01434 | -0.00446 | 0.00543  | 0.00388  | 0.00595 |
| 11278 | 1888.42 | 124.1 | 3.51 | 0.24  | 0.0229 | 0.0266 | 35.49 | 1.678 | 7.826  | 3.1343 | 0.00823  | 0.04291 | -0.01443 | 0.00263  | 0.01369 | -0.00460 | 0.00526  | 0.00323  | 0.00581 |
| 11279 | 1887.98 | 124.3 | 3.51 | 0.24  | 0.0195 | 0.0312 | 35.61 | 1.678 | 7.954  | 3.1334 | 0.00615  | 0.04200 | -0.01493 | 0.00196  | 0.01340 | -0.00476 | 0.00459  | 0.00295  | 0.00565 |
| 11280 | 1888.13 | 124.2 | 3.51 | 0.23  | 0.0195 | 0.0303 | 35.74 | 1.677 | 8.086  | 3.1341 | 0.00314  | 0.03879 | -0.01396 | 0.00100  | 0.01238 | -0.00445 | 0.00364  | 0.00192  | 0.00596 |
| 11281 | 1888.56 | 124.2 | 3.51 | 0.23  | 0.0202 | 0.0279 | 35.86 | 1.677 | 8.208  | 3.1353 | 0.00124  | 0.03688 | -0.01497 | 0.00040  | 0.01176 | -0.00477 | 0.00303  | 0.00130  | 0.00564 |
| 11282 | 1888.27 | 124.3 | 3.51 | 0.24  | 0.0229 | 0.0285 | 35.99 | 1.678 | 8.325  | 3.1331 | -0.00137 | 0.03782 | -0.01211 | -0.00044 | 0.01207 | -0.00386 | 0.00220  | 0.00161  | 0.00655 |
| 11283 | 1888.56 | 124.3 | 3.51 | 0.24  | 0.0195 | 0.0312 | 36.11 | 1.678 | 8.454  | 3.1347 | -0.00298 | 0.03399 | -0.01360 | -0.00095 | 0.01084 | -0.00434 | 0.00168  | 0.00039  | 0.00608 |
| 11284 | 1888.13 | 124.0 | 3.51 | 0.23  | 0.0192 | 0.0357 | 36.24 | 1.677 | 8.583  | 3.1339 | -0.00403 | 0.03221 | -0.01281 | -0.00129 | 0.01028 | -0.00409 | 0.00135  | -0.00018 | 0.00633 |
| 11285 | 1888.56 | 124.1 | 3.51 | 0.23  | 0.0174 | 0.0348 | 36.36 | 1.677 | 8.713  | 3.1342 | -0.00760 | 0.02798 | -0.01412 | -0.00242 | 0.00893 | -0.00451 | 0.00021  | -0.00153 | 0.00591 |
| 11286 | 1887.84 | 124.2 | 3.51 | 0.23  | 0.0181 | 0.0333 | 36.49 | 1.677 | 8.834  | 3.1326 | -0.01152 | 0.02184 | -0.01547 | -0.00368 | 0.00697 | -0.00494 | -0.00104 | -0.00349 | 0.00547 |
| 11287 | 1888.56 | 124.1 | 3.51 | 0.23  | 0.0171 | 0.0411 | 36.61 | 1.677 | 8.962  | 3.1349 | -0.01367 | 0.01819 | -0.01728 | -0.00436 | 0.00580 | -0.00551 | -0.00173 | -0.00465 | 0.00490 |
| 11288 | 1888.42 | 124.3 | 3.51 | 0.24  | 0.0178 | 0.0396 | 36.74 | 1.678 | 9.079  | 3.1339 | -0.01902 | 0.01408 | -0.01865 | -0.00607 | 0.00449 | -0.00595 | -0.00344 | -0.00596 | 0.00446 |
| 11289 | 1888.85 | 124.2 | 3.51 | 0.24  | 0.0188 | 0.0346 | 36.86 | 1.678 | 9.200  | 3.1353 | -0.02177 | 0.00792 | -0.02347 | -0.00694 | 0.00252 | -0.00749 | -0.00431 | -0.00793 | 0.00293 |
| 11290 | 1888.13 | 124.2 | 3.51 | 0.24  | 0.0219 | 0.0391 | 36.99 | 1.678 | 9.327  | 3.1334 | -0.02476 | 0.00525 | -0.02399 | -0.      |         |          |          |          |         |

Table A18. Concluded.

Run = 160

M = 1.60

xsppos = 42.351

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 11310 | 1888.27 | 123.9 | 3.51 | 0.24  | 0.0240 | 0.0318 | 39.49 | 1.678 | 11.825 | 3.1345 | -0.01242 | 0.02877 | -0.05633 | -0.00396 | 0.00918 | -0.01797 | -0.00133 | -0.00128 | -0.00756 |
| 11311 | 1887.55 | 124.2 | 3.51 | 0.24  | 0.0257 | 0.0319 | 39.61 | 1.678 | 11.945 | 3.1329 | -0.01156 | 0.03210 | -0.05372 | -0.00369 | 0.01025 | -0.01715 | -0.00106 | -0.00021 | -0.00673 |
| 11312 | 1888.27 | 124.2 | 3.51 | 0.25  | 0.0243 | 0.0339 | 39.74 | 1.678 | 12.070 | 3.1338 | -0.00934 | 0.03245 | -0.05011 | -0.00298 | 0.01036 | -0.01599 | -0.00035 | -0.00010 | -0.00558 |
| 11313 | 1887.12 | 124.4 | 3.50 | 0.24  | 0.0240 | 0.0356 | 39.86 | 1.678 | 12.200 | 3.1322 | -0.01022 | 0.03342 | -0.04574 | -0.00326 | 0.01067 | -0.01460 | -0.00063 | 0.00021  | -0.00419 |
| 11314 | 1888.13 | 124.2 | 3.51 | 0.24  | 0.0284 | 0.0306 | 39.99 | 1.678 | 12.319 | 3.1343 | -0.01028 | 0.03136 | -0.04287 | -0.00328 | 0.01001 | -0.01368 | -0.00065 | -0.00045 | -0.00327 |
| 11315 | 1886.98 | 124.4 | 3.50 | 0.25  | 0.0260 | 0.0311 | 40.12 | 1.679 | 12.443 | 3.1319 | -0.00907 | 0.03022 | -0.03923 | -0.00290 | 0.00965 | -0.01252 | -0.00026 | -0.00081 | -0.00211 |
| 11316 | 1888.42 | 124.0 | 3.51 | 0.25  | 0.0260 | 0.0339 | 40.24 | 1.678 | 12.569 | 3.1337 | -0.00891 | 0.03091 | -0.03741 | -0.00284 | 0.00986 | -0.01194 | -0.00021 | -0.00059 | -0.00152 |
| 11317 | 1887.41 | 124.4 | 3.50 | 0.24  | 0.0222 | 0.0374 | 40.37 | 1.678 | 12.702 | 3.1322 | -0.00803 | 0.02781 | -0.03881 | -0.00256 | 0.00888 | -0.01239 | 0.00007  | -0.00158 | -0.00198 |
| 11318 | 1888.70 | 124.0 | 3.51 | 0.24  | 0.0243 | 0.0329 | 40.49 | 1.678 | 12.825 | 3.1346 | -0.00974 | 0.02585 | -0.03853 | -0.00311 | 0.00825 | -0.01229 | -0.00047 | -0.00221 | -0.00188 |
| 11319 | 1887.26 | 124.3 | 3.50 | 0.25  | 0.0291 | 0.0319 | 40.61 | 1.679 | 12.938 | 3.1334 | -0.01059 | 0.02461 | -0.04008 | -0.00338 | 0.00786 | -0.01279 | -0.00075 | -0.00260 | -0.00238 |
| 11320 | 1888.56 | 124.1 | 3.51 | 0.24  | 0.0215 | 0.0380 | 40.74 | 1.678 | 13.077 | 3.1342 | -0.01239 | 0.02382 | -0.03721 | -0.00395 | 0.00760 | -0.01187 | -0.00132 | -0.00286 | -0.00146 |
| 11321 | 1887.12 | 124.5 | 3.50 | 0.24  | 0.0253 | 0.0363 | 40.86 | 1.678 | 13.199 | 3.1320 | -0.01370 | 0.02153 | -0.03860 | -0.00437 | 0.00688 | -0.01232 | -0.00174 | -0.00358 | -0.00191 |
| 11322 | 1888.42 | 124.1 | 3.51 | 0.24  | 0.0246 | 0.0341 | 40.99 | 1.678 | 13.321 | 3.1333 | -0.01387 | 0.02168 | -0.03614 | -0.00443 | 0.00692 | -0.01154 | -0.00179 | -0.00354 | -0.00112 |
| 11323 | 1886.98 | 124.3 | 3.50 | 0.24  | 0.0247 | 0.0350 | 41.11 | 1.678 | 13.449 | 3.1321 | -0.01617 | 0.02181 | -0.03795 | -0.00516 | 0.00696 | -0.01212 | -0.00253 | -0.00349 | -0.00170 |
| 11324 | 1888.27 | 124.1 | 3.51 | 0.24  | 0.0257 | 0.0356 | 41.24 | 1.678 | 13.572 | 3.1344 | -0.01573 | 0.02244 | -0.03825 | -0.00502 | 0.00716 | -0.01220 | -0.00238 | -0.00330 | -0.00179 |
| 11325 | 1886.83 | 124.6 | 3.50 | 0.24  | 0.0226 | 0.0386 | 41.36 | 1.678 | 13.701 | 3.1317 | -0.01346 | 0.02947 | -0.03785 | -0.00430 | 0.00941 | -0.01209 | -0.00166 | -0.00105 | -0.00167 |
| 11326 | 1888.56 | 124.1 | 3.51 | 0.24  | 0.0233 | 0.0389 | 41.49 | 1.678 | 13.827 | 3.1340 | -0.01282 | 0.03074 | -0.03624 | -0.00409 | 0.00981 | -0.01156 | -0.00146 | -0.00065 | -0.00115 |
| 11327 | 1886.83 | 124.4 | 3.50 | 0.24  | 0.0247 | 0.0350 | 41.61 | 1.678 | 13.948 | 3.1313 | -0.00785 | 0.03267 | -0.03634 | -0.00251 | 0.01043 | -0.01160 | 0.00012  | -0.00002 | -0.00119 |
| 11328 | 1888.42 | 124.0 | 3.51 | 0.24  | 0.0253 | 0.0363 | 41.74 | 1.678 | 14.069 | 3.1340 | -0.00745 | 0.03044 | -0.03694 | -0.00238 | 0.00971 | -0.01179 | 0.00025  | -0.00074 | -0.00137 |
| 11329 | 1887.84 | 124.2 | 3.51 | 0.24  | 0.0229 | 0.0341 | 41.87 | 1.678 | 14.199 | 3.1337 | -0.00788 | 0.02757 | -0.03844 | -0.00251 | 0.00880 | -0.01227 | 0.00012  | -0.00166 | -0.00185 |
| 11330 | 1888.42 | 124.0 | 3.51 | 0.24  | 0.0243 | 0.0367 | 41.99 | 1.678 | 14.323 | 3.1341 | -0.01010 | 0.02650 | -0.04066 | -0.00322 | 0.00846 | -0.01297 | -0.00059 | -0.00200 | -0.00256 |
| 11331 | 1887.55 | 124.4 | 3.50 | 0.24  | 0.0226 | 0.0348 | 42.11 | 1.678 | 14.452 | 3.1324 | -0.01274 | 0.02415 | -0.04000 | -0.00407 | 0.00771 | -0.01277 | -0.00144 | -0.00275 | -0.00236 |
| 11332 | 1888.42 | 124.1 | 3.51 | 0.24  | 0.0212 | 0.0350 | 42.24 | 1.678 | 14.577 | 3.1340 | -0.01421 | 0.02635 | -0.04177 | -0.00453 | 0.00841 | -0.01333 | -0.00190 | -0.00205 | -0.00292 |
| 11333 | 1887.55 | 124.2 | 3.51 | 0.25  | 0.0260 | 0.0330 | 42.36 | 1.678 | 14.692 | 3.1327 | -0.01505 | 0.02873 | -0.04136 | -0.00480 | 0.00917 | -0.01320 | -0.00217 | -0.00129 | -0.00279 |
| 11334 | 1888.85 | 124.0 | 3.51 | 0.25  | 0.0274 | 0.0300 | 42.49 | 1.679 | 14.814 | 3.1352 | -0.01381 | 0.03286 | -0.03817 | -0.00440 | 0.01048 | -0.01217 | -0.00177 | 0.00002  | -0.00176 |
| 11335 | 1887.41 | 124.5 | 3.50 | 0.23  | 0.0188 | 0.0383 | 42.61 | 1.677 | 14.958 | 3.1326 | -0.00671 | 0.03504 | -0.03386 | -0.00214 | 0.01119 | -0.01081 | 0.00049  | 0.00073  | -0.00040 |
| 11336 | 1888.42 | 124.1 | 3.51 | 0.24  | 0.0243 | 0.0320 | 42.74 | 1.678 | 15.074 | 3.1343 | -0.00522 | 0.03653 | -0.03139 | -0.00167 | 0.01165 | -0.01001 | 0.00097  | 0.00120  | 0.00040  |
| 11337 | 1887.41 | 124.3 | 3.51 | 0.24  | 0.0253 | 0.0307 | 42.86 | 1.678 | 15.194 | 3.1324 | -0.00519 | 0.03598 | -0.03258 | -0.00166 | 0.01149 | -0.01040 | 0.00098  | 0.00103  | 0.00001  |
| 11338 | 1888.42 | 123.9 | 3.51 | 0.25  | 0.0233 | 0.0352 | 42.99 | 1.678 | 15.318 | 3.1334 | -0.00367 | 0.03711 | -0.03293 | -0.00117 | 0.01184 | -0.01051 | 0.00146  | 0.00139  | -0.00010 |
| 11339 | 1887.55 | 124.3 | 3.51 | 0.24  | 0.0250 | 0.0315 | 43.11 | 1.678 | 15.448 | 3.1324 | -0.00448 | 0.03462 | -0.03715 | -0.00143 | 0.01105 | -0.01186 | 0.00120  | 0.00060  | -0.00145 |
| 11340 | 1888.85 | 124.1 | 3.51 | 0.24  | 0.0229 | 0.0322 | 43.24 | 1.678 | 15.572 | 3.1346 | -0.00558 | 0.03506 | -0.03955 | -0.00178 | 0.01119 | -0.01262 | 0.00085  | 0.00073  | -0.00220 |
| 11341 | 1888.13 | 124.1 | 3.51 | 0.24  | 0.0212 | 0.0359 | 43.36 | 1.678 | 15.705 | 3.1345 | -0.00566 | 0.03242 | -0.04115 | -0.00181 | 0.01034 | -0.01313 | 0.00083  | -0.00011 | -0.00271 |
| 11342 | 1888.99 | 124.0 | 3.51 | 0.24  | 0.0267 | 0.0287 | 43.49 | 1.678 | 15.822 | 3.1356 | -0.00672 | 0.03288 | -0.03872 | -0.00214 | 0.01048 | -0.01235 | 0.00049  | 0.00003  | -0.00193 |
| 11343 | 1887.70 | 124.2 | 3.51 | 0.24  | 0.0274 | 0.0300 | 43.61 | 1.678 | 15.943 | 3.1329 | -0.00778 | 0.03173 | -0.03507 | -0.00248 | 0.01013 | -0.01119 | 0.00015  | -0.00033 | -0.00078 |
| 11344 | 1888.13 | 124.1 | 3.51 | 0.24  | 0.0246 | 0.0303 | 43.74 | 1.678 | 16.072 | 3.1339 | -0.00682 | 0.03230 | -0.03053 | -0.00217 | 0.01031 | -0.00974 | 0.00046  | -0.00015 | 0.00067  |
| 11345 | 1887.70 | 124.3 | 3.51 | 0.24  | 0.0243 | 0.0320 | 43.87 | 1.678 | 16.202 | 3.1334 | -0.00781 | 0.03249 | -0.02986 | -0.00249 | 0.01037 | -0.00953 | 0.00014  | -0.00009 | 0.00088  |
| 11346 | 1888.99 | 124.1 | 3.51 | 0.25  | 0.0264 | 0.0285 | 43.99 | 1.678 | 16.317 | 3.1348 | -0.00801 | 0.03229 | -0.02920 | -0.00255 | 0.01030 | -0.00931 | 0.00008  | -0.00016 | 0.00110  |
| 11347 | 1887.84 | 124.2 | 3.51 | 0.25  | 0.0260 | 0.0320 | 44.11 | 1.678 | 16.441 | 3.1336 | -0.00758 | 0.03243 | -0.02882 | -0.00242 | 0.01035 | -0.00920 | 0.00021  | -0.00011 | 0.00122  |
| 11348 | 1888.56 | 124.1 | 3.51 | 0.24  | 0.0240 | 0.0318 | 44.24 | 1.678 | 16.570 | 3.1347 | -0.00778 | 0.03319 | -0.02910 | -0.00248 | 0.01059 | -0.00928 | 0.00015  | 0.00013  | 0.00113  |
| 11349 | 1888.27 | 124.0 | 3.51 | 0.23  | 0.0202 | 0.0400 | 44.36 | 1.678 | 16.708 | 3.1327 | -0.00741 | 0.03300 | -0.02724 | -0.00237 | 0.01053 | -0.00870 | 0.00027  | 0.00008  | 0.00172  |
| 11350 | 1888.13 | 124.0 | 3.51 | 0.24  | 0.0209 | 0.0339 | 44.49 | 1.678 | 16.826 | 3.1336 | -0.00750 | 0.03306 | -0.03006 | -0.00239 | 0.01055 | -0.00959 | 0.00024  | 0.00009  | 0.00082  |
| 11351 | 1888.13 | 124.2 | 3.51 | 0.24  | 0.0216 | 0.0324 | 44.61 | 1.678 | 16.949 | 3.1335 | -0.00704 | 0.03306 | -0.02977 | -0.00225 | 0.01055 | -0.00950 | 0.00039  | 0.00009  | 0.00091  |
| 11352 | 1888.42 | 124.1 | 3.51 | 0.24  | 0.0236 | 0.0316 | 44.74 | 1.678 | 17.076 | 3.1344 | -0.00784 | 0.03304 | -0.03188 | -0.00250 | 0.01054 | -0.01017 | 0.00013  | 0.00009  | 0.00024  |
| 11353 | 1888.27 | 124.1 | 3.51 | 0.25  | 0.0264 | 0.0294 | 44.86 | 1.678 | 17.192 | 3.1334 | -0.00734 | 0.03402 | -0.03185 | -0.00234 | 0.01086 | -0.01016 | 0.00029  | 0.00040  | 0.00025  |
| 11354 | 1888.42 | 124.1 | 3.51 | 0.24  | 0.0243 | 0.0311 | 44.99 | 1.678 | 17.323 | 3.1342 | -0.00761 | 0.03302 | -0.03103 | -0.00243 | 0.01054 | -0.00990 | 0.00021  | 0.00008  | 0.00051  |
| 11355 | 1887.84 | 124.1 | 3.51 | 0.24  | 0.0243 | 0.0311 | 45.12 | 1.678 | 17.448 | 3.1328 | -0.00815 | 0.03329 | -0.03076 | -0.00260 | 0.01063 | -0.00982 | 0.00003  | 0.00017  | 0.00060  |
| 11356 | 1888.27 | 124.2 | 3.51 | 0.24  | 0.0219 | 0.0316 | 45.24 | 1.678 | 17.574 | 3.1342 | -0.00849 | 0.03283 | -0.03101 | -0.00271 | 0.01048 | -0.00989 | -0.00008 | 0.00002  | 0.00052  |
| 11357 | 1888.56 | 124.3 | 3.51 | 0.24  | 0.0243 | 0.0329 | 45.36 | 1.678 | 17.700 | 3.1347 | -0.00647 | 0.03332 | -0.03129 | -0.00206 | 0.01063 | -0.00998 | 0.00057  | 0.00017  | 0.00043  |

Table A19. Run 196.

Run = 196

M = 1.60

xsppos = 42.352

| point | p0      | t0    | rnft | alpha | cnmrc   | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|---------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 12751 | 1887.55 | 124.7 | 3.50 | -0.27 | 0.0056  | 0.0320 | 21.36 | 1.664 | -6.078 | 3.1353 | -0.01001 | 0.03273 | -0.00732 | -0.00319 | 0.01044 | -0.00233 | -0.00011 | -0.00039 | 0.00001  |
| 12752 | 1888.85 | 124.3 | 3.51 | -0.27 | 0.0108  | 0.0283 | 21.49 | 1.665 | -5.956 | 3.1380 | -0.00968 | 0.03449 | -0.00674 | -0.00308 | 0.01099 | -0.00215 | 0.00000  | 0.00016  | 0.00019  |
| 12753 | 1888.70 | 124.0 | 3.51 | -0.28 | 0.0066  | 0.0325 | 21.61 | 1.664 | -5.816 | 3.1375 | -0.00975 | 0.03413 | -0.00788 | -0.00311 | 0.01088 | -0.00251 | -0.00003 | 0.00005  | -0.00017 |
| 12754 | 1888.13 | 124.5 | 3.50 | -0.28 | 0.0060  | 0.0331 | 21.74 | 1.664 | -5.693 | 3.1366 | -0.00987 | 0.03415 | -0.00512 | -0.00315 | 0.01089 | -0.00163 | -0.00007 | 0.00006  | 0.00071  |
| 12755 | 1887.12 | 124.4 | 3.50 | -0.27 | 0.0070  | 0.0300 | 21.87 | 1.665 | -5.580 | 3.1356 | -0.00899 | 0.03435 | -0.00966 | -0.00287 | 0.01095 | -0.00308 | 0.00021  | 0.00013  | -0.00074 |
| 12756 | 1888.85 | 123.8 | 3.51 | -0.28 | 0.0080  | 0.0268 | 21.99 | 1.664 | -5.449 | 3.1380 | -0.00933 | 0.03427 | -0.00618 | -0.00297 | 0.01092 | -0.00197 | 0.00011  | 0.00009  | 0.00037  |
| 12757 | 1888.56 | 124.2 | 3.51 | -0.28 | 0.0077  | 0.0303 | 22.12 | 1.664 | -5.322 | 3.1378 | -0.00963 | 0.03293 | -0.00753 | -0.00307 | 0.01049 | -0.00240 | 0.00001  | -0.00034 | -0.00006 |
| 12758 | 1887.41 | 124.5 | 3.50 | -0.28 | 0.0032  | 0.0372 | 22.24 | 1.664 | -5.189 | 3.1351 | -0.00906 | 0.03387 | -0.00553 | -0.00289 | 0.01080 | -0.00176 | 0.00019  | -0.00003 | 0.00058  |
| 12759 | 1888.99 | 123.8 | 3.51 | -0.28 | 0.0077  | 0.0284 | 22.36 | 1.664 | -5.068 | 3.1387 | -0.00985 | 0.03380 | -0.00924 | -0.00314 | 0.01077 | -0.00295 | -0.00006 | -0.00006 | -0.00060 |
| 12760 | 1888.70 | 123.8 | 3.51 | -0.29 | 0.0032  | 0.0344 | 22.49 | 1.663 | -4.935 | 3.1367 | -0.00889 | 0.03459 | -0.00703 | -0.00283 | 0.01103 | -0.00224 | 0.00025  | 0.00020  | 0.00010  |
| 12761 | 1887.55 | 124.3 | 3.51 | -0.27 | 0.0060  | 0.0322 | 22.61 | 1.664 | -4.825 | 3.1356 | -0.00922 | 0.03352 | -0.00949 | -0.00294 | 0.01069 | -0.00303 | 0.00014  | -0.00014 | -0.00069 |
| 12762 | 1888.70 | 123.9 | 3.51 | -0.27 | 0.0053  | 0.0290 | 22.74 | 1.664 | -4.700 | 3.1381 | -0.01003 | 0.03444 | -0.00727 | -0.00320 | 0.01097 | -0.00232 | -0.00012 | 0.00015  | 0.00003  |
| 12763 | 1888.27 | 124.1 | 3.51 | -0.28 | 0.0056  | 0.0301 | 22.86 | 1.664 | -4.569 | 3.1370 | -0.00956 | 0.03373 | -0.00845 | -0.00305 | 0.01075 | -0.00269 | -0.00003 | -0.00008 | -0.00035 |
| 12764 | 1887.41 | 124.5 | 3.50 | -0.27 | 0.0080  | 0.0259 | 22.99 | 1.665 | -4.455 | 3.1346 | -0.00911 | 0.03390 | -0.00439 | -0.00291 | 0.01081 | -0.00140 | 0.00017  | -0.00002 | 0.00094  |
| 12765 | 1888.13 | 124.1 | 3.51 | -0.26 | 0.0084  | 0.0288 | 23.11 | 1.665 | -4.341 | 3.1367 | -0.00965 | 0.03315 | -0.00747 | -0.00308 | 0.01057 | -0.00238 | 0.00000  | -0.00026 | -0.00004 |
| 12766 | 1888.42 | 123.9 | 3.51 | -0.27 | 0.0066  | 0.0270 | 23.24 | 1.664 | -4.200 | 3.1372 | -0.00848 | 0.03432 | -0.00816 | -0.00270 | 0.01094 | -0.00260 | 0.00038  | 0.00011  | -0.00026 |
| 12767 | 1888.13 | 124.3 | 3.51 | -0.27 | 0.0077  | 0.0294 | 23.36 | 1.665 | -4.079 | 3.1376 | -0.00986 | 0.03261 | -0.01103 | -0.00314 | 0.01039 | -0.00351 | -0.00006 | -0.00044 | -0.00117 |
| 12768 | 1887.12 | 124.3 | 3.50 | -0.27 | 0.0080  | 0.0277 | 23.49 | 1.665 | -3.955 | 3.1356 | -0.01110 | 0.03286 | -0.00850 | -0.00354 | 0.01048 | -0.00271 | -0.00046 | -0.00035 | -0.00037 |
| 12769 | 1888.70 | 123.9 | 3.51 | -0.28 | 0.0063  | 0.0286 | 23.61 | 1.664 | -3.822 | 3.1384 | -0.01128 | 0.03378 | -0.00955 | -0.00359 | 0.01076 | -0.00304 | -0.00051 | -0.00007 | -0.00070 |
| 12770 | 1888.42 | 124.2 | 3.51 | -0.27 | 0.0066  | 0.0316 | 23.74 | 1.664 | -3.701 | 3.1370 | -0.00931 | 0.03426 | -0.00645 | -0.00297 | 0.01092 | -0.00206 | 0.00011  | 0.00009  | 0.00029  |
| 12771 | 1887.12 | 124.5 | 3.50 | -0.28 | 0.0012  | 0.0333 | 23.86 | 1.664 | -3.563 | 3.1333 | -0.01035 | 0.03551 | -0.00566 | -0.00330 | 0.01133 | -0.00181 | -0.00022 | 0.00050  | 0.00054  |
| 12772 | 1888.70 | 124.0 | 3.51 | -0.29 | 0.0056  | 0.0320 | 23.99 | 1.664 | -3.440 | 3.1380 | -0.01031 | 0.03390 | -0.00714 | -0.00329 | 0.01080 | -0.00228 | -0.00021 | -0.00003 | 0.00006  |
| 12773 | 1888.27 | 124.3 | 3.51 | -0.28 | 0.0039  | 0.0338 | 24.11 | 1.664 | -3.317 | 3.1362 | -0.00957 | 0.03503 | -0.00711 | -0.00305 | 0.01117 | -0.00227 | 0.00003  | 0.00034  | 0.00007  |
| 12774 | 1887.26 | 125.0 | 3.50 | -0.28 | 0.0042  | 0.0312 | 24.24 | 1.664 | -3.193 | 3.1350 | -0.01116 | 0.03644 | -0.00967 | -0.00356 | 0.01162 | -0.00308 | -0.00048 | 0.00079  | -0.00074 |
| 12775 | 1888.85 | 124.3 | 3.51 | -0.29 | 0.0046  | 0.0240 | 24.37 | 1.663 | -3.060 | 3.1375 | -0.00871 | 0.03792 | -0.00666 | -0.00278 | 0.01209 | -0.00212 | 0.00031  | 0.00126  | 0.00022  |
| 12776 | 1888.56 | 124.0 | 3.51 | -0.28 | 0.0053  | 0.0253 | 24.49 | 1.664 | -2.939 | 3.1373 | -0.00803 | 0.03709 | -0.00707 | -0.00256 | 0.01182 | -0.00225 | 0.00052  | 0.00099  | 0.00009  |
| 12777 | 1888.13 | 124.5 | 3.50 | -0.29 | 0.0036  | 0.0318 | 24.61 | 1.663 | -2.807 | 3.1355 | -0.00527 | 0.03552 | -0.00568 | -0.00168 | 0.01133 | -0.00181 | 0.00140  | 0.00050  | 0.00053  |
| 12778 | 1886.98 | 124.7 | 3.50 | -0.29 | 0.0060  | 0.0238 | 24.74 | 1.664 | -2.690 | 3.1348 | -0.00783 | 0.03280 | -0.00817 | -0.00250 | 0.01046 | -0.00261 | 0.00058  | -0.00037 | -0.00027 |
| 12779 | 1889.14 | 124.0 | 3.51 | -0.29 | 0.0025  | 0.0284 | 24.86 | 1.663 | -2.559 | 3.1380 | -0.00899 | 0.03269 | -0.00740 | -0.00287 | 0.01042 | -0.00236 | 0.00021  | -0.00041 | -0.00002 |
| 12780 | 1888.70 | 124.1 | 3.51 | -0.24 | 0.0080  | 0.0296 | 24.86 | 1.666 | -2.606 | 3.1377 | -0.00821 | 0.03179 | -0.00773 | -0.00262 | 0.01013 | -0.00246 | 0.00046  | -0.00070 | -0.00012 |
| 12781 | 1887.84 | 124.5 | 3.50 | -0.24 | 0.0073  | 0.0236 | 24.99 | 1.666 | -2.480 | 3.1358 | -0.01020 | 0.03248 | -0.01010 | -0.00325 | 0.01036 | -0.00322 | -0.00017 | -0.00047 | -0.00088 |
| 12782 | 1886.69 | 124.5 | 3.50 | -0.24 | 0.0036  | 0.0337 | 25.11 | 1.666 | -2.347 | 3.1335 | -0.01015 | 0.03471 | -0.00646 | -0.00324 | 0.01108 | -0.00206 | -0.00016 | 0.00025  | 0.00028  |
| 12783 | 1888.27 | 124.0 | 3.51 | -0.29 | 0.0005  | 0.0413 | 25.11 | 1.663 | -2.311 | 3.1375 | -0.01248 | 0.03393 | -0.00970 | -0.00398 | 0.01081 | -0.00309 | -0.00090 | -0.00002 | -0.00075 |
| 12784 | 1887.26 | 124.1 | 3.51 | -0.27 | 0.0053  | 0.0458 | 25.24 | 1.665 | -2.203 | 3.1348 | -0.01093 | 0.03694 | -0.00682 | -0.00349 | 0.01178 | -0.00218 | -0.00041 | 0.00095  | 0.00016  |
| 12785 | 1888.85 | 123.9 | 3.51 | -0.26 | 0.0046  | 0.0454 | 25.36 | 1.665 | -2.086 | 3.1381 | -0.00933 | 0.04084 | -0.00851 | -0.00297 | 0.01301 | -0.00271 | 0.00011  | 0.00219  | -0.00037 |
| 12786 | 1887.98 | 124.0 | 3.51 | -0.27 | 0.0022  | 0.0459 | 25.49 | 1.664 | -1.948 | 3.1364 | -0.00739 | 0.04086 | -0.00703 | -0.00236 | 0.01303 | -0.00224 | 0.00072  | 0.00220  | 0.00010  |
| 12787 | 1887.70 | 124.4 | 3.50 | -0.27 | 0.0053  | 0.0430 | 25.61 | 1.665 | -1.830 | 3.1361 | -0.00397 | 0.04181 | -0.00760 | -0.00127 | 0.01333 | -0.00242 | 0.00181  | 0.00250  | -0.00008 |
| 12788 | 1888.70 | 124.2 | 3.51 | -0.27 | 0.0059  | 0.0396 | 25.74 | 1.664 | -1.702 | 3.1375 | -0.00275 | 0.03773 | -0.00591 | -0.00088 | 0.01203 | -0.00188 | 0.00220  | 0.00120  | 0.00046  |
| 12789 | 1888.42 | 124.3 | 3.51 | -0.28 | 0.0022  | 0.0487 | 25.86 | 1.664 | -1.569 | 3.1367 | -0.00409 | 0.03579 | -0.00343 | -0.00130 | 0.01141 | -0.00109 | 0.00178  | 0.00058  | 0.00125  |
| 12790 | 1887.84 | 124.7 | 3.50 | -0.27 | 0.0035  | 0.0411 | 25.99 | 1.664 | -1.449 | 3.1372 | -0.00831 | 0.03074 | -0.00919 | -0.00265 | 0.00980 | -0.00293 | 0.00043  | -0.00103 | -0.00059 |
| 12791 | 1886.83 | 124.8 | 3.50 | -0.27 | 0.0005  | 0.0450 | 26.11 | 1.664 | -1.318 | 3.1345 | -0.00888 | 0.03010 | -0.00853 | -0.00283 | 0.00960 | -0.00272 | 0.00025  | -0.00123 | -0.00038 |
| 12792 | 1887.70 | 125.1 | 3.50 | -0.27 | 0.0015  | 0.0437 | 26.11 | 1.664 | -1.319 | 3.1360 | -0.01112 | 0.02951 | -0.00999 | -0.00355 | 0.00941 | -0.00319 | -0.00047 | -0.00142 | -0.00085 |
| 12793 | 1886.69 | 124.9 | 3.50 | -0.27 | 0.0022  | 0.0413 | 26.24 | 1.664 | -1.197 | 3.1346 | -0.01241 | 0.03022 | -0.01054 | -0.00396 | 0.00964 | -0.00336 | -0.00088 | -0.00119 | -0.00102 |
| 12794 | 1889.14 | 124.0 | 3.51 | -0.28 | 0.0032  | 0.0427 | 26.36 | 1.664 | -1.066 | 3.1385 | -0.01293 | 0.03577 | -0.00722 | -0.00412 | 0.01140 | -0.00230 | -0.00104 | 0.00057  | 0.00004  |
| 12795 | 1887.98 | 124.5 | 3.50 | -0.28 | 0.0056  | 0.0376 | 26.49 | 1.664 | -0.948 | 3.1355 | -0.01094 | 0.04029 | -0.00614 | -0.00349 | 0.01285 | -0.00196 | -0.00041 | 0.00202  | 0.00038  |
| 12796 | 1887.26 | 124.9 | 3.50 | -0.27 | 0.0022  | 0.0394 | 26.62 | 1.664 | -0.819 | 3.1355 | -0.00762 | 0.04212 | -0.00407 | -0.00243 | 0.01343 | -0.00130 | 0.00065  | 0.00260  | 0.00104  |
| 12797 | 1889.28 | 124.0 | 3.51 | -0.28 | -0.0002 | 0.0381 | 26.74 | 1.663 | -0.687 | 3.1401 | -0.00466 | 0.04284 | -0.00278 | -0.00148 | 0.01364 | -0.00088 | 0.00160  | 0.00281  | 0.00146  |
| 12798 | 1888.56 | 123.9 | 3.51 | -0.28 | 0.0036  | 0.0355 | 26.86 | 1.664 | -0.568 | 3.1371 | 0.00037  | 0.04265 | -0.00284 | 0.00012  | 0.01360 | -0.00091 | 0.00320  | 0.00277  | 0.00144  |
| 12799 | 1887.26 | 124.5 | 3.50 | -0.28 | 0.0025  | 0.0378 | 26.99 | 1.664 | -0.445 | 3.1342 | -0.00072 | 0.03867 | -0.00004 | -0.00023 | 0.01234 | -0.00001 | 0.00285  | 0.00151  | 0.00235  |
| 12800 | 1888.56 | 124.1 | 3.51 | -0.27 | 0.0025  | 0.0321 | 27.12 | 1.664 | -0.322 | 3.1375 | -0.00415 | 0.03448 | -0.00440 | -0.00132 | 0.01099 | -0.00140 | 0.00176  | 0.00016  | 0.00094  |
| 12801 | 1888.56 | 123.8 | 3.51 | -0.26 | 0.0036  | 0.0355 | 27.24 | 1.665 | -0.209 | 3.1370 | -0.00653 | 0.03212 | -0.00938 | -0.00208 | 0.01024 | -0.00299 | 0.00100  | -0.00059 | -0.00065 |
| 12802 | 1887.70 | 124.1 | 3.51 | -0.25 | 0.0022  | 0.0348 | 27.36 | 1.665 | -0.088 | 3.1359 | -0.01051 | 0.03149 | -0.00820 | -0.00335 | 0.01004 | -0.00262 | -0.00027 | -0.00079 | -0.00028 |
| 12803 | 1886.69 | 124.2 | 3.50 | -0.25 | 0.0018  | 0.0374 | 27.49 | 1.665 | 0.034  | 3.1339 | -0.01195 | 0.03627 | -0.00936 | -0.00381 | 0.01158 | -0.00299 | -0.00073 | 0.00075  | -0.00065 |
| 12804 | 1888.70 | 123.4 | 3.51 | -0.25 | 0.0008  | 0.0396 |       |       |        |        |          |         |          |          |         |          |          |          |          |

Table A19. Continued.

Run = 196

M = 1.60

xsp05 = 42.351

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c  |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|---------|
| 12824 | 1889.14 | 124.0 | 3.51 | -0.23 | 0.0049 | 0.0316 | 30.11 | 1.666 | 2.643  | 3.1394 | -0.00193 | 0.04184 | 0.00255  | -0.00061 | 0.01333 | 0.00081  | 0.00247  | 0.00250  | 0.00315 |
| 12825 | 1888.42 | 123.9 | 3.51 | -0.23 | 0.0060 | 0.0312 | 30.24 | 1.666 | 2.768  | 3.1376 | -0.00333 | 0.04285 | 0.00511  | -0.00106 | 0.01366 | 0.00163  | 0.00202  | 0.00283  | 0.00397 |
| 12826 | 1887.70 | 124.6 | 3.50 | -0.23 | 0.0073 | 0.0292 | 30.36 | 1.667 | 2.886  | 3.1359 | -0.00154 | 0.04162 | 0.00416  | -0.00049 | 0.01327 | 0.00133  | 0.00259  | 0.00244  | 0.00367 |
| 12827 | 1886.69 | 124.5 | 3.50 | -0.23 | 0.0039 | 0.0329 | 30.49 | 1.666 | 3.021  | 3.1339 | -0.00122 | 0.04177 | 0.00362  | -0.00039 | 0.01333 | 0.00115  | 0.00269  | 0.00250  | 0.00349 |
| 12828 | 1888.70 | 123.9 | 3.51 | -0.23 | 0.0084 | 0.0270 | 30.75 | 1.666 | 3.277  | 3.1370 | -0.00140 | 0.04377 | 0.00028  | -0.00045 | 0.01395 | 0.00009  | 0.00264  | 0.00312  | 0.00243 |
| 12829 | 1888.27 | 124.0 | 3.51 | -0.22 | 0.0090 | 0.0311 | 30.75 | 1.667 | 3.270  | 3.1375 | -0.00445 | 0.04236 | -0.00168 | -0.00142 | 0.01350 | -0.00054 | 0.00166  | 0.00267  | 0.00180 |
| 12830 | 1887.70 | 124.5 | 3.50 | -0.23 | 0.0077 | 0.0294 | 30.86 | 1.666 | 3.392  | 3.1356 | -0.00208 | 0.04408 | -0.00067 | -0.00066 | 0.01406 | -0.00021 | 0.00242  | 0.00323  | 0.00213 |
| 12831 | 1887.98 | 124.2 | 3.51 | -0.22 | 0.0073 | 0.0320 | 30.99 | 1.667 | 3.509  | 3.1363 | -0.00073 | 0.04630 | 0.00040  | -0.00023 | 0.01476 | 0.00013  | 0.00285  | 0.00393  | 0.00247 |
| 12832 | 1888.42 | 123.8 | 3.51 | -0.23 | 0.0080 | 0.0333 | 31.11 | 1.667 | 3.636  | 3.1362 | -0.00060 | 0.05047 | 0.00009  | -0.00019 | 0.01609 | 0.00003  | 0.00289  | 0.00526  | 0.00237 |
| 12833 | 1888.13 | 124.4 | 3.51 | -0.22 | 0.0139 | 0.0253 | 31.24 | 1.667 | 3.749  | 3.1367 | 0.00001  | 0.05113 | -0.00090 | 0.00000  | 0.01630 | -0.00029 | 0.00308  | 0.00547  | 0.00205 |
| 12834 | 1887.41 | 124.3 | 3.51 | -0.21 | 0.0097 | 0.0277 | 31.24 | 1.667 | 3.746  | 3.1348 | 0.00172  | 0.05160 | 0.00290  | 0.00055  | 0.01646 | 0.00092  | 0.00363  | 0.00563  | 0.00326 |
| 12835 | 1886.69 | 124.4 | 3.50 | -0.23 | 0.0080 | 0.0240 | 31.37 | 1.666 | 3.891  | 3.1338 | 0.00549  | 0.05145 | 0.00254  | 0.00175  | 0.01642 | 0.00081  | 0.00483  | 0.00559  | 0.00315 |
| 12836 | 1889.14 | 123.7 | 3.51 | -0.22 | 0.0091 | 0.0227 | 31.49 | 1.667 | 4.009  | 3.1378 | 0.00675  | 0.04898 | 0.00237  | 0.00215  | 0.01561 | 0.00075  | 0.00523  | 0.00478  | 0.00310 |
| 12837 | 1888.56 | 124.2 | 3.51 | -0.22 | 0.0097 | 0.0249 | 31.49 | 1.667 | 4.004  | 3.1383 | 0.00701  | 0.04771 | 0.00261  | 0.00223  | 0.01520 | 0.00083  | 0.00531  | 0.00437  | 0.00317 |
| 12838 | 1888.85 | 123.9 | 3.51 | -0.23 | 0.0080 | 0.0258 | 31.61 | 1.667 | 4.138  | 3.1384 | 0.00488  | 0.04260 | 0.00068  | 0.00156  | 0.01357 | 0.00022  | 0.00464  | 0.00274  | 0.00256 |
| 12839 | 1887.70 | 124.5 | 3.50 | -0.22 | 0.0142 | 0.0255 | 31.74 | 1.667 | 4.252  | 3.1362 | 0.00328  | 0.03946 | 0.00268  | 0.00105  | 0.01258 | 0.00085  | 0.00413  | 0.00175  | 0.00319 |
| 12840 | 1886.98 | 124.8 | 3.50 | -0.23 | 0.0094 | 0.0220 | 31.87 | 1.667 | 4.387  | 3.1353 | -0.00115 | 0.03605 | -0.00076 | -0.00037 | 0.01150 | -0.00024 | 0.00271  | 0.00067  | 0.00210 |
| 12841 | 1889.28 | 123.7 | 3.51 | -0.23 | 0.0087 | 0.0271 | 31.99 | 1.667 | 4.510  | 3.1374 | -0.00296 | 0.04062 | 0.00411  | -0.00094 | 0.01295 | 0.00131  | 0.00214  | 0.00212  | 0.00365 |
| 12842 | 1888.56 | 123.8 | 3.51 | -0.22 | 0.0135 | 0.0270 | 32.11 | 1.667 | 4.627  | 3.1381 | -0.00651 | 0.04149 | 0.00528  | -0.00207 | 0.01322 | 0.00168  | 0.00101  | 0.00239  | 0.00402 |
| 12843 | 1887.12 | 124.4 | 3.50 | -0.22 | 0.0091 | 0.0292 | 32.24 | 1.667 | 4.759  | 3.1354 | -0.00443 | 0.04614 | 0.00236  | -0.00141 | 0.01472 | 0.00075  | 0.00167  | 0.00389  | 0.00309 |
| 12844 | 1888.27 | 124.0 | 3.51 | -0.23 | 0.0108 | 0.0236 | 32.36 | 1.667 | 4.884  | 3.1378 | 0.00093  | 0.04744 | 0.00593  | 0.00030  | 0.01512 | 0.00189  | 0.00338  | 0.00429  | 0.00423 |
| 12845 | 1888.99 | 123.6 | 3.51 | -0.23 | 0.0125 | 0.0218 | 32.49 | 1.667 | 5.007  | 3.1378 | 0.00349  | 0.04724 | 0.00946  | 0.00111  | 0.01506 | 0.00302  | 0.00419  | 0.00423  | 0.00536 |
| 12846 | 1887.98 | 124.1 | 3.51 | -0.22 | 0.0087 | 0.0290 | 32.61 | 1.667 | 5.130  | 3.1372 | 0.00342  | 0.04370 | 0.00891  | 0.00109  | 0.01393 | 0.00284  | 0.00417  | 0.00310  | 0.00518 |
| 12847 | 1887.12 | 124.2 | 3.50 | -0.21 | 0.0132 | 0.0278 | 32.74 | 1.668 | 5.244  | 3.1357 | 0.00282  | 0.04491 | 0.00678  | 0.00090  | 0.01432 | 0.00216  | 0.00398  | 0.00349  | 0.00450 |
| 12848 | 1888.99 | 123.6 | 3.51 | -0.21 | 0.0108 | 0.0264 | 32.86 | 1.668 | 5.371  | 3.1388 | 0.00267  | 0.04342 | 0.00299  | 0.00085  | 0.01383 | 0.00095  | 0.00393  | 0.00300  | 0.00329 |
| 12849 | 1886.83 | 124.5 | 3.50 | -0.22 | 0.0115 | 0.0278 | 32.86 | 1.667 | 5.382  | 3.1351 | 0.00114  | 0.04273 | 0.00418  | 0.00036  | 0.01363 | 0.00133  | 0.00344  | 0.00280  | 0.00368 |
| 12850 | 1888.85 | 123.7 | 3.51 | -0.21 | 0.0128 | 0.0229 | 32.99 | 1.668 | 5.497  | 3.1377 | 0.00155  | 0.04376 | -0.00138 | 0.00050  | 0.01395 | -0.00044 | 0.00358  | 0.00312  | 0.00190 |
| 12851 | 1888.56 | 123.8 | 3.51 | -0.22 | 0.0108 | 0.0236 | 33.11 | 1.667 | 5.629  | 3.1375 | -0.00004 | 0.04505 | 0.00038  | -0.00001 | 0.01436 | 0.00012  | 0.00307  | 0.00353  | 0.00246 |
| 12852 | 1887.98 | 124.2 | 3.51 | -0.23 | 0.0094 | 0.0229 | 33.24 | 1.667 | 5.762  | 3.1358 | 0.00085  | 0.04321 | 0.00334  | 0.00027  | 0.01378 | 0.00106  | 0.00335  | 0.00295  | 0.00341 |
| 12853 | 1888.13 | 124.1 | 3.51 | -0.22 | 0.0111 | 0.0210 | 33.36 | 1.667 | 5.875  | 3.1384 | -0.00015 | 0.04328 | 0.00284  | -0.00005 | 0.01379 | 0.00091  | 0.00303  | 0.00296  | 0.00325 |
| 12854 | 1888.42 | 123.8 | 3.51 | -0.22 | 0.0111 | 0.0201 | 33.49 | 1.667 | 6.003  | 3.1380 | 0.00118  | 0.04561 | 0.00205  | 0.00038  | 0.01453 | 0.00065  | 0.00346  | 0.00370  | 0.00299 |
| 12855 | 1887.55 | 124.2 | 3.51 | -0.21 | 0.0142 | 0.0237 | 33.61 | 1.668 | 6.117  | 3.1364 | 0.00196  | 0.04716 | 0.00375  | 0.00062  | 0.01504 | 0.00120  | 0.00370  | 0.00421  | 0.00354 |
| 12856 | 1886.98 | 124.4 | 3.50 | -0.22 | 0.0101 | 0.0223 | 33.74 | 1.667 | 6.251  | 3.1346 | 0.00338  | 0.04582 | 0.00668  | 0.00108  | 0.01462 | 0.00213  | 0.00416  | 0.00379  | 0.00447 |
| 12857 | 1888.56 | 123.8 | 3.51 | -0.23 | 0.0053 | 0.0271 | 33.87 | 1.666 | 6.391  | 3.1374 | 0.00389  | 0.04391 | 0.00378  | 0.00124  | 0.01400 | 0.00121  | 0.00432  | 0.00317  | 0.00355 |
| 12858 | 1888.27 | 124.2 | 3.51 | -0.23 | 0.0073 | 0.0245 | 33.99 | 1.666 | 6.515  | 3.1374 | 0.00243  | 0.04432 | 0.00509  | 0.00078  | 0.01413 | 0.00162  | 0.00386  | 0.00330  | 0.00396 |
| 12859 | 1887.12 | 124.6 | 3.50 | -0.23 | 0.0094 | 0.0210 | 34.11 | 1.667 | 6.635  | 3.1345 | 0.00382  | 0.04565 | 0.00608  | 0.00122  | 0.01456 | 0.00194  | 0.00430  | 0.00373  | 0.00428 |
| 12860 | 1888.99 | 123.9 | 3.51 | -0.23 | 0.0070 | 0.0234 | 34.24 | 1.667 | 6.763  | 3.1380 | 0.00136  | 0.04430 | 0.00524  | 0.00043  | 0.01412 | 0.00167  | 0.00351  | 0.00329  | 0.00401 |
| 12861 | 1888.56 | 124.1 | 3.51 | -0.23 | 0.0087 | 0.0244 | 34.36 | 1.667 | 6.889  | 3.1369 | 0.00085  | 0.04750 | 0.00608  | 0.00027  | 0.01514 | 0.00194  | 0.00335  | 0.00431  | 0.00428 |
| 12862 | 1887.55 | 124.7 | 3.50 | -0.23 | 0.0084 | 0.0233 | 34.49 | 1.667 | 7.013  | 3.1353 | 0.00075  | 0.04948 | 0.00505  | 0.00024  | 0.01578 | 0.00161  | 0.00332  | 0.00495  | 0.00395 |
| 12863 | 1888.27 | 124.3 | 3.51 | -0.23 | 0.0073 | 0.0208 | 34.61 | 1.666 | 7.140  | 3.1374 | 0.00515  | 0.04492 | 0.00345  | 0.00164  | 0.01432 | 0.00110  | 0.00472  | 0.00349  | 0.00344 |
| 12864 | 1888.56 | 123.8 | 3.51 | -0.24 | 0.0039 | 0.0227 | 34.74 | 1.666 | 7.275  | 3.1376 | 0.00319  | 0.04085 | 0.00230  | 0.00102  | 0.01302 | 0.00073  | 0.00410  | 0.00219  | 0.00307 |
| 12865 | 1888.27 | 124.3 | 3.51 | -0.22 | 0.0094 | 0.0192 | 34.86 | 1.667 | 7.380  | 3.1364 | 0.00336  | 0.04398 | 0.00198  | 0.00107  | 0.01402 | 0.00063  | 0.00415  | 0.00319  | 0.00297 |
| 12866 | 1887.12 | 124.6 | 3.50 | -0.22 | 0.0087 | 0.0207 | 34.99 | 1.667 | 7.503  | 3.1350 | 0.00169  | 0.04498 | 0.00541  | 0.00054  | 0.01435 | 0.00173  | 0.00362  | 0.00352  | 0.00407 |
| 12867 | 1888.99 | 123.9 | 3.51 | -0.23 | 0.0039 | 0.0264 | 35.11 | 1.666 | 7.644  | 3.1377 | -0.00130 | 0.04370 | 0.00778  | -0.00041 | 0.01393 | 0.00248  | 0.00267  | 0.00310  | 0.00482 |
| 12868 | 1888.56 | 124.2 | 3.51 | -0.23 | 0.0056 | 0.0255 | 35.24 | 1.666 | 7.766  | 3.1378 | -0.00022 | 0.04179 | 0.00590  | -0.00007 | 0.01332 | 0.00188  | 0.00301  | 0.00249  | 0.00422 |
| 12869 | 1887.41 | 125.0 | 3.50 | -0.24 | 0.0015 | 0.0307 | 35.36 | 1.666 | 7.902  | 3.1356 | -0.00081 | 0.03853 | 0.00531  | -0.00026 | 0.01229 | 0.00169  | 0.00282  | 0.00146  | 0.00403 |
| 12870 | 1887.70 | 124.6 | 3.50 | -0.24 | 0.0053 | 0.0244 | 35.49 | 1.666 | 8.027  | 3.1368 | 0.00082  | 0.03977 | 0.00547  | 0.00026  | 0.01268 | 0.00174  | 0.00334  | 0.00185  | 0.00408 |
| 12871 | 1888.85 | 123.9 | 3.51 | -0.23 | 0.0060 | 0.0238 | 35.61 | 1.666 | 8.141  | 3.1374 | -0.00145 | 0.03936 | 0.00355  | -0.00046 | 0.01255 | 0.00113  | 0.00262  | 0.00172  | 0.00347 |
| 12872 | 1887.55 | 124.6 | 3.50 | -0.23 | 0.0053 | 0.0234 | 35.74 | 1.666 | 8.270  | 3.1363 | -0.00512 | 0.03615 | -0.00053 | -0.00163 | 0.01153 | -0.00017 | 0.00145  | 0.00070  | 0.00217 |
| 12873 | 1887.26 | 125.0 | 3.50 | -0.24 | 0.0060 | 0.0275 | 35.86 | 1.666 | 8.395  | 3.1352 | -0.00619 | 0.03417 | 0.00156  | -0.00197 | 0.01090 | 0.00050  | 0.00111  | 0.00007  | 0.00284 |
| 12874 | 1889.14 | 123.7 | 3.51 | -0.25 | 0.0005 | 0.0291 | 35.99 | 1.665 | 8.536  | 3.1396 | -0.00105 | 0.03047 | 0.00091  | -0.00323 | 0.00970 | 0.00029  | -0.00015 | -0.00113 | 0.00263 |
| 12875 | 1888.70 | 124.0 | 3.51 | -0.24 | 0.0032 | 0.0269 | 36.11 | 1.666 | 8.650  | 3.1389 | -0.01086 | 0.02973 | 0.00116  | -0.00346 | 0.00947 | 0.00037  | -0.00038 | -0.00136 | 0.00271 |
| 12876 | 1887.12 | 124.5 | 3.50 | -0.24 | 0.0036 | 0.0271 | 36.24 | 1.666 | 8.773  | 3.1363 | -0.01158 | 0.02657 | -0.00017 | -0.00369 | 0.00847 | -0.00006 | -0.00061 | -0.00236 | 0.00229 |
| 12877 | 1889.14 | 123.8 | 3.51 | -0.25 | 0.0001 | 0.0317 |       |       |        |        |          |         |          |          |         |          |          |          |         |

Table A19. Concluded.

Run = 196

M = 1.60

xsppos = 42.350

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 12897 | 1889.14 | 124.0 | 3.51 | -0.23 | 0.0094 | 0.0312 | 38.74 | 1.666 | 11.263 | 3.1390 | -0.01660 | 0.02169 | -0.02276 | -0.00529 | 0.00691 | -0.00725 | -0.00221 | -0.00392 | -0.00491 |
| 12898 | 1888.13 | 124.4 | 3.51 | -0.22 | 0.0108 | 0.0339 | 38.86 | 1.667 | 11.381 | 3.1378 | -0.01699 | 0.02190 | -0.02323 | -0.00542 | 0.00698 | -0.00740 | -0.00234 | -0.00385 | -0.00506 |
| 12899 | 1887.41 | 125.0 | 3.50 | -0.24 | 0.0042 | 0.0359 | 38.99 | 1.666 | 11.523 | 3.1349 | -0.01878 | 0.02129 | -0.01477 | -0.00599 | 0.00679 | -0.00471 | -0.00291 | -0.00404 | -0.00237 |
| 12900 | 1886.69 | 124.8 | 3.50 | -0.23 | 0.0063 | 0.0324 | 39.11 | 1.666 | 11.640 | 3.1351 | -0.01854 | 0.01859 | -0.02203 | -0.00591 | 0.00593 | -0.00703 | -0.00283 | -0.00490 | -0.00469 |
| 12901 | 1888.99 | 123.7 | 3.51 | -0.23 | 0.0118 | 0.0279 | 39.24 | 1.667 | 11.758 | 3.1374 | -0.01697 | 0.01746 | -0.02086 | -0.00541 | 0.00556 | -0.00665 | -0.00233 | -0.00527 | -0.00431 |
| 12902 | 1888.13 | 124.3 | 3.51 | -0.23 | 0.0101 | 0.0326 | 39.36 | 1.666 | 11.889 | 3.1373 | -0.01564 | 0.01879 | -0.02648 | -0.00499 | 0.00599 | -0.00844 | -0.00191 | -0.00484 | -0.00610 |
| 12903 | 1887.12 | 124.8 | 3.50 | -0.24 | 0.0053 | 0.0355 | 39.49 | 1.666 | 12.025 | 3.1355 | -0.01618 | 0.02204 | -0.02658 | -0.00516 | 0.00703 | -0.00848 | -0.00208 | -0.00380 | -0.00614 |
| 12904 | 1889.57 | 123.9 | 3.51 | -0.24 | 0.0059 | 0.0349 | 39.61 | 1.666 | 12.148 | 3.1392 | -0.01558 | 0.02620 | -0.02576 | -0.00496 | 0.00835 | -0.00821 | -0.00188 | -0.00248 | -0.00587 |
| 12905 | 1888.56 | 124.2 | 3.51 | -0.24 | 0.0073 | 0.0348 | 39.74 | 1.666 | 12.274 | 3.1381 | -0.01702 | 0.02770 | -0.02691 | -0.00542 | 0.00883 | -0.00857 | -0.00234 | -0.00200 | -0.00623 |
| 12906 | 1887.26 | 124.9 | 3.50 | -0.24 | 0.0077 | 0.0387 | 39.86 | 1.666 | 12.397 | 3.1348 | -0.01422 | 0.02824 | -0.02270 | -0.00454 | 0.00901 | -0.00724 | -0.00146 | -0.00182 | -0.00490 |
| 12907 | 1888.27 | 123.8 | 3.51 | -0.25 | 0.0059 | 0.0378 | 39.86 | 1.666 | 12.402 | 3.1385 | -0.01611 | 0.02773 | -0.02504 | -0.00513 | 0.00883 | -0.00798 | -0.00205 | -0.00199 | -0.00564 |
| 12908 | 1887.12 | 124.5 | 3.50 | -0.24 | 0.0046 | 0.0398 | 39.99 | 1.666 | 12.528 | 3.1355 | -0.01360 | 0.02656 | -0.01912 | -0.00434 | 0.00847 | -0.00610 | -0.00126 | -0.00236 | -0.00376 |
| 12909 | 1889.28 | 123.8 | 3.51 | -0.24 | 0.0080 | 0.0370 | 40.11 | 1.666 | 12.643 | 3.1394 | -0.01388 | 0.02623 | -0.02046 | -0.00442 | 0.00836 | -0.00652 | -0.00134 | -0.00247 | -0.00418 |
| 12910 | 1888.56 | 123.7 | 3.51 | -0.24 | 0.0046 | 0.0370 | 40.24 | 1.666 | 12.770 | 3.1386 | -0.01276 | 0.02467 | -0.01844 | -0.00407 | 0.00786 | -0.00588 | -0.00099 | -0.00297 | -0.00354 |
| 12911 | 1887.26 | 124.3 | 3.51 | -0.23 | 0.0059 | 0.0415 | 40.36 | 1.666 | 12.892 | 3.1356 | -0.01195 | 0.02580 | -0.01763 | -0.00381 | 0.00823 | -0.00562 | -0.00073 | -0.00260 | -0.00328 |
| 12912 | 1887.98 | 124.0 | 3.51 | -0.23 | 0.0053 | 0.0337 | 40.49 | 1.666 | 13.019 | 3.1374 | -0.01288 | 0.02484 | -0.01522 | -0.00411 | 0.00792 | -0.00485 | -0.00103 | -0.00291 | -0.00251 |
| 12913 | 1888.27 | 123.6 | 3.51 | -0.23 | 0.0066 | 0.0363 | 40.61 | 1.667 | 13.137 | 3.1366 | -0.01370 | 0.02469 | -0.01259 | -0.00437 | 0.00787 | -0.00401 | -0.00129 | -0.00296 | -0.00167 |
| 12914 | 1887.84 | 124.1 | 3.51 | -0.22 | 0.0111 | 0.0304 | 40.74 | 1.667 | 13.253 | 3.1366 | -0.01577 | 0.02233 | -0.01353 | -0.00503 | 0.00712 | -0.00431 | -0.00195 | -0.00371 | -0.00197 |
| 12915 | 1886.83 | 124.2 | 3.50 | -0.24 | 0.0053 | 0.0374 | 40.86 | 1.666 | 13.398 | 3.1357 | -0.01621 | 0.02029 | -0.01266 | -0.00517 | 0.00647 | -0.00404 | -0.00209 | -0.00436 | -0.00170 |
| 12916 | 1888.56 | 123.5 | 3.51 | -0.23 | 0.0104 | 0.0300 | 40.99 | 1.667 | 13.510 | 3.1380 | -0.01886 | 0.02179 | -0.01298 | -0.00601 | 0.00694 | -0.00414 | -0.00293 | -0.00389 | -0.00180 |
| 12917 | 1887.98 | 123.9 | 3.51 | -0.24 | 0.0063 | 0.0352 | 41.11 | 1.666 | 13.653 | 3.1370 | -0.01888 | 0.02100 | -0.01441 | -0.00602 | 0.00669 | -0.00459 | -0.00294 | -0.00413 | -0.00225 |
| 12918 | 1887.26 | 124.3 | 3.51 | -0.24 | 0.0115 | 0.0296 | 41.24 | 1.666 | 13.764 | 3.1352 | -0.01858 | 0.02623 | -0.01787 | -0.00593 | 0.00747 | -0.00570 | -0.00285 | -0.00336 | -0.00336 |
| 12919 | 1888.85 | 123.5 | 3.51 | -0.23 | 0.0073 | 0.0329 | 41.36 | 1.666 | 13.892 | 3.1386 | -0.01612 | 0.02960 | -0.01786 | -0.00514 | 0.00943 | -0.00569 | -0.00206 | -0.00140 | -0.00335 |
| 12920 | 1888.13 | 123.9 | 3.51 | -0.23 | 0.0084 | 0.0335 | 41.49 | 1.667 | 14.010 | 3.1370 | -0.01341 | 0.03057 | -0.01597 | -0.00428 | 0.00974 | -0.00509 | -0.00120 | -0.00108 | -0.00275 |
| 12921 | 1888.85 | 123.6 | 3.51 | -0.24 | 0.0053 | 0.0355 | 41.49 | 1.666 | 14.026 | 3.1372 | -0.01269 | 0.03265 | -0.01296 | -0.00404 | 0.01041 | -0.00413 | -0.00096 | -0.00042 | -0.00179 |
| 12922 | 1887.70 | 124.3 | 3.51 | -0.24 | 0.0066 | 0.0381 | 41.61 | 1.666 | 14.144 | 3.1360 | -0.01056 | 0.03248 | -0.01555 | -0.00337 | 0.01036 | -0.00496 | -0.00029 | -0.00047 | -0.00262 |
| 12923 | 1886.83 | 124.5 | 3.50 | -0.24 | 0.0084 | 0.0307 | 41.74 | 1.666 | 14.274 | 3.1347 | -0.01071 | 0.02959 | -0.01909 | -0.00342 | 0.00944 | -0.00609 | -0.00034 | -0.00139 | -0.00375 |
| 12924 | 1888.99 | 123.7 | 3.51 | -0.24 | 0.0049 | 0.0372 | 41.86 | 1.666 | 14.401 | 3.1378 | -0.00958 | 0.02796 | -0.01552 | -0.00305 | 0.00891 | -0.00495 | 0.00003  | -0.00192 | -0.00261 |
| 12925 | 1888.13 | 124.2 | 3.51 | -0.24 | 0.0066 | 0.0335 | 41.99 | 1.666 | 14.526 | 3.1385 | -0.01484 | 0.02235 | -0.01979 | -0.00473 | 0.00712 | -0.00631 | -0.00165 | -0.00371 | -0.00397 |
| 12926 | 1887.26 | 124.5 | 3.50 | -0.24 | 0.0077 | 0.0322 | 42.11 | 1.666 | 14.649 | 3.1361 | -0.01638 | 0.02144 | -0.02137 | -0.00522 | 0.00684 | -0.00681 | -0.00214 | -0.00399 | -0.00447 |
| 12927 | 1887.55 | 124.4 | 3.50 | -0.24 | 0.0070 | 0.0337 | 42.11 | 1.666 | 14.647 | 3.1374 | -0.01660 | 0.01978 | -0.01929 | -0.00529 | 0.00631 | -0.00615 | -0.00221 | -0.00452 | -0.00381 |
| 12928 | 1887.12 | 124.4 | 3.50 | -0.23 | 0.0108 | 0.0311 | 42.24 | 1.667 | 14.760 | 3.1352 | -0.01801 | 0.02267 | -0.01979 | -0.00574 | 0.00723 | -0.00631 | -0.00266 | -0.00360 | -0.00397 |
| 12929 | 1888.70 | 123.8 | 3.51 | -0.24 | 0.0073 | 0.0338 | 42.36 | 1.666 | 14.894 | 3.1387 | -0.01793 | 0.02835 | -0.02124 | -0.00571 | 0.00903 | -0.00677 | -0.00263 | -0.00180 | -0.00443 |
| 12930 | 1888.13 | 124.1 | 3.51 | -0.22 | 0.0066 | 0.0353 | 42.49 | 1.667 | 15.009 | 3.1373 | -0.01390 | 0.03325 | -0.02031 | -0.00443 | 0.01060 | -0.00647 | -0.00135 | -0.00023 | -0.00413 |
| 12931 | 1886.83 | 124.4 | 3.50 | -0.23 | 0.0084 | 0.0335 | 42.61 | 1.666 | 15.141 | 3.1350 | -0.01103 | 0.03657 | -0.01631 | -0.00352 | 0.01167 | -0.00520 | -0.00044 | 0.00084  | -0.00286 |
| 12932 | 1888.99 | 123.8 | 3.51 | -0.24 | 0.0070 | 0.0318 | 42.74 | 1.666 | 15.275 | 3.1398 | -0.00856 | 0.03493 | -0.01443 | -0.00273 | 0.01112 | -0.00460 | 0.00035  | 0.00029  | -0.00225 |
| 12933 | 1888.27 | 124.3 | 3.51 | -0.23 | 0.0060 | 0.0359 | 42.86 | 1.666 | 15.389 | 3.1373 | -0.00772 | 0.03672 | -0.01001 | -0.00246 | 0.01170 | -0.00319 | 0.00062  | 0.00087  | -0.00085 |
| 12934 | 1886.83 | 124.7 | 3.50 | -0.24 | 0.0087 | 0.0318 | 42.99 | 1.666 | 15.516 | 3.1350 | -0.00796 | 0.03390 | -0.01118 | -0.00254 | 0.01081 | -0.00357 | 0.00054  | -0.00002 | -0.00123 |
| 12935 | 1888.85 | 124.0 | 3.51 | -0.26 | 0.0011 | 0.0370 | 43.11 | 1.665 | 15.668 | 3.1385 | -0.00713 | 0.03403 | -0.01608 | -0.00227 | 0.01084 | -0.00512 | 0.00081  | 0.00001  | -0.00278 |
| 12936 | 1888.70 | 123.7 | 3.51 | -0.23 | 0.0104 | 0.0337 | 43.24 | 1.667 | 15.763 | 3.1387 | -0.00957 | 0.03251 | -0.01921 | -0.00305 | 0.01036 | -0.00612 | 0.00003  | -0.00047 | -0.00378 |
| 12937 | 1887.84 | 124.3 | 3.51 | -0.24 | 0.0080 | 0.0314 | 43.36 | 1.666 | 15.893 | 3.1359 | -0.00757 | 0.03250 | -0.01754 | -0.00242 | 0.01036 | -0.00559 | 0.00067  | -0.00047 | -0.00325 |
| 12938 | 1886.83 | 124.3 | 3.50 | -0.26 | 0.0049 | 0.0288 | 43.49 | 1.665 | 16.036 | 3.1346 | -0.00885 | 0.03209 | -0.01434 | -0.00282 | 0.01024 | -0.00458 | 0.00026  | -0.00059 | -0.00224 |
| 12939 | 1888.85 | 123.8 | 3.51 | -0.25 | 0.0063 | 0.0333 | 43.61 | 1.665 | 16.157 | 3.1385 | -0.01284 | 0.03035 | -0.00861 | -0.00409 | 0.00967 | -0.00274 | -0.00101 | -0.00116 | -0.00040 |
| 12940 | 1888.13 | 124.5 | 3.50 | -0.26 | 0.0060 | 0.0322 | 43.74 | 1.665 | 16.286 | 3.1363 | -0.01021 | 0.03236 | -0.00546 | -0.00325 | 0.01032 | -0.00174 | -0.00017 | -0.00051 | 0.00060  |
| 12941 | 1887.26 | 125.0 | 3.50 | -0.25 | 0.0066 | 0.0298 | 43.86 | 1.665 | 16.405 | 3.1365 | -0.01205 | 0.03276 | -0.00654 | -0.00384 | 0.01045 | -0.00209 | -0.00076 | -0.00038 | 0.00026  |
| 12942 | 1889.28 | 124.1 | 3.51 | -0.25 | 0.0073 | 0.0320 | 43.99 | 1.666 | 16.525 | 3.1387 | -0.01095 | 0.03091 | -0.00539 | -0.00349 | 0.00985 | -0.00172 | -0.00041 | -0.00098 | 0.00062  |
| 12943 | 1888.27 | 124.1 | 3.51 | -0.25 | 0.0063 | 0.0324 | 44.11 | 1.665 | 16.656 | 3.1380 | -0.01275 | 0.03206 | -0.00449 | -0.00406 | 0.01022 | -0.00143 | -0.00098 | -0.00061 | 0.00091  |
| 12944 | 1888.27 | 124.1 | 3.51 | -0.26 | 0.0049 | 0.0363 | 44.11 | 1.665 | 16.664 | 3.1366 | -0.01189 | 0.03224 | -0.00236 | -0.00379 | 0.01028 | -0.00075 | -0.00071 | -0.00055 | 0.00159  |
| 12945 | 1889.14 | 123.4 | 3.52 | -0.24 | 0.0090 | 0.0329 | 44.24 | 1.666 | 16.769 | 3.1391 | -0.01154 | 0.03213 | -0.00508 | -0.00368 | 0.01023 | -0.00162 | -0.00060 | -0.00059 | 0.00072  |
| 12946 | 1888.56 | 123.9 | 3.51 | -0.25 | 0.0032 | 0.0362 | 44.36 | 1.665 | 16.908 | 3.1378 | -0.01118 | 0.03175 | -0.00405 | -0.00356 | 0.01012 | -0.00129 | -0.00048 | -0.00071 | 0.00105  |
| 12947 | 1888.42 | 123.7 | 3.51 | -0.24 | 0.0053 | 0.0337 | 44.36 | 1.666 | 16.898 | 3.1380 | -0.01263 | 0.03127 | -0.00506 | -0.00403 | 0.00996 | -0.00161 | -0.00095 | -0.00087 | 0.00073  |
| 12948 | 1887.70 | 124.4 | 3.50 | -0.23 | 0.0073 | 0.0311 | 44.49 | 1.666 | 17.014 | 3.1360 | -0.01081 | 0.03218 | -0.00679 | -0.00345 | 0.01026 | -0.00216 | -0.00037 | -0.00057 | 0.00018  |
| 12949 | 1886.40 | 124.5 | 3.50 | -0.24 | 0.0046 | 0.0333 | 44.61 | 1.666 | 17.146 | 3.1336 | -0.00998 | 0.03337 | -0.00591 | -0.00318 | 0.01065 | -0.00189 | -0.00010 | -0.00018 | 0.00045  |
| 12950 | 1889.14 |       |      |       |        |        |       |       |        |        |          |         |          |          |         |          |          |          |          |



Table A20. Run 197.

Run = 197  
M = 1.60  
xsppos = 42.350

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 12969 | 1887.70 | 124.0 | 3.51 | 0.27  | 0.0365 | 0.0117 | 21.36 | 1.692 | -6.533 | 3.1369 | -0.00941 | 0.03028 | -0.01044 | -0.00300 | 0.00965 | -0.00333 | 0.00028  | -0.00004 | -0.00060 |
| 12970 | 1888.42 | 123.6 | 3.51 | 0.27  | 0.0310 | 0.0189 | 21.49 | 1.692 | -6.399 | 3.1372 | -0.00921 | 0.03010 | -0.00751 | -0.00294 | 0.00960 | -0.00239 | 0.00035  | -0.00010 | 0.00033  |
| 12971 | 1887.98 | 124.2 | 3.51 | 0.27  | 0.0351 | 0.0109 | 21.61 | 1.692 | -6.279 | 3.1373 | -0.01123 | 0.03052 | -0.01062 | -0.00358 | 0.00973 | -0.00338 | -0.00030 | 0.00003  | -0.00066 |
| 12972 | 1886.83 | 124.2 | 3.50 | 0.27  | 0.0338 | 0.0055 | 21.74 | 1.692 | -6.157 | 3.1340 | -0.01056 | 0.03061 | -0.00522 | -0.00337 | 0.00977 | -0.00167 | -0.00009 | 0.00007  | 0.00106  |
| 12973 | 1888.42 | 123.4 | 3.51 | 0.28  | 0.0365 | 0.0014 | 21.86 | 1.692 | -6.037 | 3.1374 | -0.01106 | 0.03057 | -0.00893 | -0.00352 | 0.00974 | -0.00285 | -0.00024 | 0.00005  | -0.00012 |
| 12974 | 1888.27 | 123.9 | 3.51 | 0.27  | 0.0348 | 0.0042 | 21.99 | 1.692 | -5.911 | 3.1372 | -0.01022 | 0.02716 | -0.00704 | -0.00326 | 0.00866 | -0.00224 | 0.00002  | -0.00104 | 0.00048  |
| 12975 | 1887.26 | 124.2 | 3.51 | 0.27  | 0.0355 | 0.0018 | 22.11 | 1.692 | -5.785 | 3.1350 | -0.01018 | 0.02737 | -0.00548 | -0.00325 | 0.00873 | -0.00175 | 0.00004  | -0.00097 | 0.00098  |
| 12976 | 1889.28 | 123.5 | 3.51 | 0.27  | 0.0372 | 0.0018 | 22.24 | 1.692 | -5.660 | 3.1389 | -0.01052 | 0.02802 | -0.00897 | -0.00335 | 0.00893 | -0.00286 | -0.00007 | -0.00077 | -0.00014 |
| 12977 | 1888.27 | 123.6 | 3.51 | 0.27  | 0.0375 | 0.0011 | 22.36 | 1.692 | -5.534 | 3.1358 | -0.00941 | 0.02973 | -0.00925 | -0.00300 | 0.00948 | -0.00295 | 0.00028  | -0.00021 | -0.00023 |
| 12978 | 1887.70 | 124.1 | 3.51 | 0.27  | 0.0348 | 0.0070 | 22.49 | 1.692 | -5.406 | 3.1358 | -0.01032 | 0.02771 | -0.00585 | -0.00329 | 0.00884 | -0.00186 | -0.00001 | -0.00086 | 0.00086  |
| 12979 | 1886.83 | 123.9 | 3.51 | 0.27  | 0.0317 | 0.0035 | 22.61 | 1.692 | -5.279 | 3.1362 | -0.01207 | 0.02685 | -0.00761 | -0.00385 | 0.00856 | -0.00243 | -0.00057 | -0.00114 | 0.00030  |
| 12980 | 1888.56 | 123.4 | 3.51 | 0.27  | 0.0334 | 0.0035 | 22.74 | 1.692 | -5.158 | 3.1378 | -0.01159 | 0.02711 | -0.00696 | -0.00369 | 0.00864 | -0.00222 | -0.00041 | -0.00106 | 0.00051  |
| 12981 | 1888.27 | 123.9 | 3.51 | 0.28  | 0.0382 | 0.0005 | 22.87 | 1.693 | -5.041 | 3.1371 | -0.01034 | 0.02808 | -0.00898 | -0.00330 | 0.00895 | -0.00286 | -0.00001 | -0.00075 | -0.00014 |
| 12982 | 1887.26 | 124.4 | 3.50 | 0.27  | 0.0362 | 0.0022 | 22.99 | 1.692 | -4.909 | 3.1346 | -0.00960 | 0.02928 | -0.00701 | -0.00306 | 0.00934 | -0.00223 | 0.00022  | -0.00036 | 0.00049  |
| 12983 | 1888.70 | 123.6 | 3.51 | 0.27  | 0.0320 | 0.0074 | 23.11 | 1.692 | -4.777 | 3.1390 | -0.01110 | 0.02701 | -0.00851 | -0.00354 | 0.00860 | -0.00271 | -0.00025 | -0.00109 | 0.00001  |
| 12984 | 1888.13 | 123.9 | 3.51 | 0.28  | 0.0358 | 0.0048 | 23.24 | 1.692 | -4.664 | 3.1362 | -0.00996 | 0.02937 | -0.00656 | -0.00318 | 0.00937 | -0.00209 | 0.00011  | -0.00033 | 0.00063  |
| 12985 | 1887.98 | 124.4 | 3.51 | 0.28  | 0.0372 | 0.0046 | 23.36 | 1.693 | -4.541 | 3.1368 | -0.01124 | 0.02737 | -0.00762 | -0.00358 | 0.00873 | -0.00243 | -0.00030 | -0.00097 | 0.00029  |
| 12986 | 1887.84 | 124.2 | 3.51 | 0.28  | 0.0369 | 0.0054 | 23.49 | 1.693 | -4.417 | 3.1368 | -0.01160 | 0.02803 | -0.00492 | -0.00370 | 0.00894 | -0.00157 | -0.00042 | -0.00076 | 0.00115  |
| 12987 | 1888.42 | 123.9 | 3.51 | 0.28  | 0.0338 | 0.0092 | 23.61 | 1.692 | -4.288 | 3.1381 | -0.01080 | 0.02766 | -0.00831 | -0.00344 | 0.00881 | -0.00265 | -0.00016 | -0.00088 | 0.00008  |
| 12988 | 1887.98 | 124.4 | 3.50 | 0.28  | 0.0351 | 0.0156 | 23.74 | 1.693 | -4.167 | 3.1367 | -0.00966 | 0.02829 | -0.00685 | -0.00308 | 0.00902 | -0.00218 | 0.00020  | -0.00068 | 0.00054  |
| 12989 | 1886.83 | 124.8 | 3.50 | 0.29  | 0.0376 | 0.0123 | 23.86 | 1.693 | -4.045 | 3.1346 | -0.01000 | 0.02842 | -0.00800 | -0.00319 | 0.00907 | -0.00255 | 0.00009  | -0.00063 | 0.00017  |
| 12990 | 1888.70 | 123.8 | 3.51 | 0.28  | 0.0327 | 0.0161 | 23.99 | 1.692 | -3.915 | 3.1371 | -0.00954 | 0.02744 | -0.00584 | -0.00304 | 0.00875 | -0.00186 | 0.00024  | -0.00095 | 0.00086  |
| 12991 | 1887.98 | 123.9 | 3.51 | 0.29  | 0.0334 | 0.0109 | 24.11 | 1.693 | -3.795 | 3.1374 | -0.00888 | 0.02703 | -0.00730 | -0.00283 | 0.00861 | -0.00233 | 0.00045  | -0.00108 | 0.00040  |
| 12992 | 1887.41 | 124.3 | 3.51 | 0.28  | 0.0307 | 0.0094 | 24.24 | 1.692 | -3.661 | 3.1351 | -0.00897 | 0.02762 | -0.00704 | -0.00286 | 0.00881 | -0.00224 | 0.00042  | -0.00089 | 0.00048  |
| 12993 | 1887.84 | 124.3 | 3.51 | 0.30  | 0.0338 | 0.0083 | 24.24 | 1.693 | -3.681 | 3.1364 | -0.00954 | 0.02833 | -0.00683 | -0.00304 | 0.00903 | -0.00218 | 0.00024  | -0.00066 | 0.00054  |
| 12994 | 1886.98 | 124.7 | 3.50 | 0.29  | 0.0307 | 0.0104 | 24.36 | 1.693 | -3.545 | 3.1347 | -0.01044 | 0.02889 | -0.00738 | -0.00333 | 0.00922 | -0.00235 | -0.00005 | -0.00048 | 0.00037  |
| 12995 | 1888.99 | 123.8 | 3.51 | 0.29  | 0.0341 | 0.0057 | 24.49 | 1.693 | -3.421 | 3.1381 | -0.00907 | 0.02965 | -0.00915 | -0.00289 | 0.00945 | -0.00291 | 0.00039  | -0.00025 | -0.00019 |
| 12996 | 1888.42 | 124.1 | 3.51 | 0.30  | 0.0358 | 0.0057 | 24.61 | 1.693 | -3.305 | 3.1377 | -0.00985 | 0.02937 | -0.00861 | -0.00314 | 0.00936 | -0.00275 | 0.00014  | -0.00034 | -0.00002 |
| 12997 | 1887.98 | 124.2 | 3.51 | 0.30  | 0.0341 | 0.0038 | 24.61 | 1.693 | -3.300 | 3.1360 | -0.01001 | 0.03087 | -0.00702 | -0.00319 | 0.00984 | -0.00224 | 0.00009  | 0.00015  | 0.00048  |
| 12998 | 1886.83 | 124.5 | 3.50 | 0.30  | 0.0352 | 0.0091 | 24.74 | 1.693 | -3.181 | 3.1340 | -0.00940 | 0.03317 | -0.00808 | -0.00300 | 0.01058 | -0.00258 | 0.00028  | 0.00089  | 0.00015  |
| 12999 | 1888.70 | 123.6 | 3.51 | 0.30  | 0.0344 | 0.0087 | 24.86 | 1.693 | -3.057 | 3.1382 | -0.00936 | 0.03139 | -0.00673 | -0.00298 | 0.01000 | -0.00214 | 0.00030  | 0.00031  | 0.00058  |
| 13000 | 1888.42 | 123.8 | 3.51 | 0.30  | 0.0338 | 0.0074 | 24.99 | 1.694 | -2.933 | 3.1365 | -0.00679 | 0.03132 | -0.00497 | -0.00216 | 0.00998 | -0.00158 | 0.00112  | 0.00029  | 0.00114  |
| 13001 | 1887.41 | 124.2 | 3.51 | 0.31  | 0.0345 | 0.0078 | 25.11 | 1.694 | -2.813 | 3.1353 | -0.00637 | 0.02815 | -0.00708 | -0.00203 | 0.00898 | -0.00226 | 0.00125  | -0.00072 | 0.00046  |
| 13002 | 1888.70 | 123.8 | 3.51 | 0.32  | 0.0348 | 0.0070 | 25.24 | 1.694 | -2.695 | 3.1393 | -0.00907 | 0.02620 | -0.01010 | -0.00289 | 0.00835 | -0.00322 | 0.00039  | -0.00135 | -0.00049 |
| 13003 | 1887.26 | 124.2 | 3.51 | 0.31  | 0.0355 | 0.0074 | 25.24 | 1.694 | -2.686 | 3.1349 | -0.00790 | 0.02774 | -0.00768 | -0.00252 | 0.00885 | -0.00245 | 0.00076  | -0.00085 | 0.00027  |
| 13004 | 1888.85 | 123.6 | 3.51 | 0.30  | 0.0331 | 0.0079 | 25.36 | 1.693 | -2.556 | 3.1383 | -0.01166 | 0.02721 | -0.00664 | -0.00371 | 0.00867 | -0.00212 | -0.00043 | -0.00103 | 0.00061  |
| 13005 | 1888.27 | 123.7 | 3.51 | 0.31  | 0.0355 | 0.0083 | 25.49 | 1.694 | -2.440 | 3.1378 | -0.01259 | 0.02846 | -0.00627 | -0.00401 | 0.00907 | -0.00200 | -0.00073 | -0.00063 | 0.00072  |
| 13006 | 1887.55 | 124.4 | 3.50 | 0.30  | 0.0345 | 0.0096 | 25.61 | 1.694 | -2.309 | 3.1354 | -0.01132 | 0.03122 | -0.00814 | -0.00361 | 0.00996 | -0.00260 | -0.00033 | 0.00026  | 0.00013  |
| 13007 | 1887.98 | 124.1 | 3.51 | 0.30  | 0.0317 | 0.0118 | 25.74 | 1.693 | -2.180 | 3.1372 | -0.00929 | 0.03444 | -0.00638 | -0.00296 | 0.01098 | -0.00203 | 0.00032  | 0.00128  | 0.00069  |
| 13008 | 1888.42 | 123.6 | 3.51 | 0.29  | 0.0314 | 0.0117 | 25.86 | 1.693 | -2.048 | 3.1373 | -0.00832 | 0.03572 | -0.00321 | -0.00265 | 0.01139 | -0.00102 | 0.00063  | 0.00169  | 0.00170  |
| 13009 | 1887.98 | 124.0 | 3.51 | 0.30  | 0.0303 | 0.0167 | 25.99 | 1.693 | -1.924 | 3.1365 | -0.00517 | 0.03613 | -0.00403 | -0.00165 | 0.01152 | -0.00128 | 0.00163  | 0.00182  | 0.00144  |
| 13010 | 1887.12 | 124.3 | 3.50 | 0.29  | 0.0300 | 0.0137 | 26.11 | 1.693 | -1.793 | 3.1345 | -0.00417 | 0.03216 | -0.00411 | -0.00133 | 0.01026 | -0.00131 | 0.00195  | 0.00056  | 0.00141  |
| 13011 | 1888.99 | 123.9 | 3.51 | 0.28  | 0.0317 | 0.0100 | 26.24 | 1.692 | -1.662 | 3.1388 | -0.00486 | 0.02864 | -0.00357 | -0.00155 | 0.00913 | -0.00114 | 0.00173  | -0.00057 | 0.00159  |
| 13012 | 1888.42 | 123.9 | 3.51 | 0.30  | 0.0303 | 0.0083 | 26.36 | 1.693 | -1.550 | 3.1377 | -0.00642 | 0.02547 | -0.00866 | -0.00204 | 0.00812 | -0.00276 | 0.00124  | -0.00158 | -0.00004 |
| 13013 | 1887.55 | 124.3 | 3.51 | 0.31  | 0.0307 | 0.0122 | 26.49 | 1.693 | -1.432 | 3.1355 | -0.01052 | 0.02382 | -0.00601 | -0.00336 | 0.00760 | -0.00192 | -0.00007 | -0.00210 | 0.00081  |
| 13014 | 1886.69 | 124.6 | 3.50 | 0.28  | 0.0300 | 0.0146 | 26.61 | 1.692 | -1.288 | 3.1348 | -0.01283 | 0.02571 | -0.00830 | -0.00409 | 0.00820 | -0.00265 | -0.00081 | -0.00149 | 0.00008  |
| 13015 | 1888.99 | 123.8 | 3.51 | 0.29  | 0.0317 | 0.0072 | 26.74 | 1.693 | -1.172 | 3.1385 | -0.01413 | 0.03089 | -0.00649 | -0.00450 | 0.00984 | -0.00207 | -0.00122 | 0.00014  | 0.00066  |
| 13016 | 1888.27 | 123.9 | 3.51 | 0.30  | 0.0324 | 0.0085 | 26.87 | 1.693 | -1.049 | 3.1363 | -0.01298 | 0.03644 | -0.00212 | -0.00414 | 0.01162 | -0.00068 | -0.00086 | 0.00192  | 0.00205  |
| 13017 | 1887.70 | 124.4 | 3.50 | 0.29  | 0.0314 | 0.0117 | 26.99 | 1.693 | -0.919 | 3.1361 | -0.00535 | 0.03960 | -0.00174 | -0.00171 | 0.01263 | -0.00056 | 0.00158  | 0.00293  | 0.00217  |
| 13018 | 1886.98 | 124.4 | 3.50 | 0.30  | 0.0321 | 0.0083 | 27.11 | 1.693 | -0.800 | 3.1362 | -0.00373 | 0.03696 | -0.00028 | -0.00119 | 0.01179 | -0.00009 | 0.00209  | 0.00209  | 0.00263  |
| 13019 | 1888.56 | 123.8 | 3.51 | 0.29  | 0.0307 | 0.0103 | 27.24 | 1.693 | -0.670 | 3.1384 | -0.00229 | 0.03470 | -0.00193 | -0.00073 | 0.01106 | -0.00062 | 0.00255  | 0.00136  | 0.00211  |
| 13020 | 1888.27 | 124.4 | 3.51 | 0.29  | 0.0310 | 0.0105 | 27.36 | 1.693 | -0.548 | 3.1372 | -0.00200 | 0.03298 | 0.00024  | -0.00064 | 0.01051 | 0.00008  | 0.00265  | 0.00082  | 0.00280  |
| 13021 | 1887.12 | 124.8 | 3.50 | 0.29  | 0.0307 | 0.0113 | 27.49 | 1.693 | -0.419 | 3.1361 | -0.00447 | 0.02871 | -0.00485 | -0.00143 | 0.00915 | -0.00155 | 0.00186  | -0.00054 | 0.00118  |
| 13022 | 1889.14 | 124.0 | 3.51 | 0.30  | 0.0324 | 0.0076 | 27.61 | 1.693 | -0.307 | 3.1386 | -0.00824 | 0.02740 | -0.00776 |          |         |          |          |          |          |

Table A20. Continued.

Run = 197  
M = 1.60  
xsppos = 42.350

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc   | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c  | dpp02c   | dpp03c  |
|-------|---------|-------|------|-------|--------|---------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|---------|----------|---------|
| 13042 | 1886.98 | 124.1 | 3.51 | 0.29  | 0.0376 | -0.0008 | 30.11 | 1.693 | 2.198  | 3.1354 | -0.00295 | 0.03907 | -0.00268 | -0.00094 | 0.01246 | -0.00086 | 0.00234 | 0.00276  | 0.00187 |
| 13043 | 1888.56 | 123.5 | 3.51 | 0.31  | 0.0413 | -0.0015 | 30.24 | 1.694 | 2.304  | 3.1387 | -0.00299 | 0.03749 | -0.00220 | -0.00095 | 0.01194 | -0.00070 | 0.00233 | 0.00225  | 0.00202 |
| 13044 | 1887.84 | 123.9 | 3.51 | 0.30  | 0.0382 | 0.0024  | 30.36 | 1.694 | 2.442  | 3.1374 | -0.00381 | 0.03919 | 0.00189  | -0.00122 | 0.01249 | 0.00060  | 0.00207 | 0.00279  | 0.00332 |
| 13045 | 1886.83 | 124.3 | 3.50 | 0.29  | 0.0314 | 0.0061  | 30.49 | 1.693 | 2.577  | 3.1347 | -0.00221 | 0.03875 | 0.00820  | -0.00070 | 0.01236 | 0.00262  | 0.00258 | 0.00266  | 0.00534 |
| 13046 | 1888.85 | 123.7 | 3.51 | 0.31  | 0.0396 | 0.0041  | 30.69 | 1.694 | 2.762  | 3.1387 | -0.00256 | 0.03792 | 0.00522  | -0.00081 | 0.01208 | 0.00166  | 0.00247 | 0.00238  | 0.00439 |
| 13047 | 1888.13 | 123.7 | 3.51 | 0.31  | 0.0379 | 0.0003  | 30.74 | 1.694 | 2.810  | 3.1370 | -0.00297 | 0.03910 | 0.00572  | -0.00095 | 0.01246 | 0.00182  | 0.00234 | 0.00277  | 0.00455 |
| 13048 | 1887.70 | 124.3 | 3.51 | 0.30  | 0.0365 | 0.0070  | 30.86 | 1.694 | 2.941  | 3.1361 | -0.00056 | 0.03813 | 0.00381  | -0.00018 | 0.01216 | 0.00121  | 0.00310 | 0.00246  | 0.00394 |
| 13049 | 1887.12 | 124.3 | 3.50 | 0.31  | 0.0379 | 0.0022  | 30.99 | 1.694 | 3.059  | 3.1358 | -0.00326 | 0.03757 | 0.00250  | -0.00104 | 0.01198 | 0.00080  | 0.00224 | 0.00229  | 0.00352 |
| 13050 | 1888.70 | 123.6 | 3.51 | 0.30  | 0.0362 | 0.0059  | 31.11 | 1.693 | 3.193  | 3.1382 | -0.00180 | 0.04060 | 0.00274  | -0.00058 | 0.01294 | 0.00087  | 0.00271 | 0.00324  | 0.00360 |
| 13051 | 1888.27 | 123.9 | 3.51 | 0.31  | 0.0382 | 0.0052  | 31.24 | 1.694 | 3.309  | 3.1367 | -0.00283 | 0.04256 | 0.00316  | -0.00090 | 0.01357 | 0.00101  | 0.00238 | 0.00387  | 0.00373 |
| 13052 | 1887.41 | 124.3 | 3.51 | 0.31  | 0.0400 | 0.0052  | 31.36 | 1.694 | 3.429  | 3.1354 | -0.00108 | 0.04554 | 0.00356  | -0.00034 | 0.01453 | 0.00113  | 0.00294 | 0.00483  | 0.00386 |
| 13053 | 1887.84 | 124.1 | 3.51 | 0.29  | 0.0369 | 0.0072  | 31.49 | 1.693 | 3.577  | 3.1372 | 0.00168  | 0.04846 | 0.00253  | 0.00054  | 0.01545 | 0.00081  | 0.00382 | 0.00575  | 0.00353 |
| 13054 | 1888.56 | 123.9 | 3.51 | 0.30  | 0.0338 | 0.0102  | 31.62 | 1.693 | 3.701  | 3.1389 | 0.00290  | 0.04715 | 0.00119  | 0.00092  | 0.01502 | 0.00038  | 0.00421 | 0.00532  | 0.00310 |
| 13055 | 1888.13 | 124.3 | 3.51 | 0.30  | 0.0382 | 0.0070  | 31.74 | 1.693 | 3.820  | 3.1363 | 0.00658  | 0.04690 | 0.00544  | 0.00210  | 0.01495 | 0.00174  | 0.00538 | 0.00526  | 0.00446 |
| 13056 | 1887.41 | 124.6 | 3.50 | 0.30  | 0.0358 | 0.0085  | 31.86 | 1.694 | 3.941  | 3.1358 | 0.00800  | 0.04163 | 0.00315  | 0.00255  | 0.01327 | 0.00100  | 0.00583 | 0.00358  | 0.00373 |
| 13057 | 1888.99 | 124.1 | 3.51 | 0.29  | 0.0368 | 0.0044  | 31.99 | 1.693 | 4.075  | 3.1387 | 0.00316  | 0.03633 | 0.00406  | 0.00101  | 0.01158 | 0.00129  | 0.00429 | 0.00188  | 0.00402 |
| 13058 | 1888.56 | 124.2 | 3.51 | 0.31  | 0.0344 | 0.0096  | 32.11 | 1.694 | 4.189  | 3.1368 | 0.00033  | 0.03585 | 0.00365  | 0.00011  | 0.01143 | 0.00116  | 0.00339 | 0.00173  | 0.00389 |
| 13059 | 1887.41 | 124.8 | 3.50 | 0.30  | 0.0379 | 0.0050  | 32.24 | 1.693 | 4.321  | 3.1362 | -0.00501 | 0.03417 | 0.00633  | -0.00160 | 0.01090 | 0.00202  | 0.00168 | 0.00120  | 0.00474 |
| 13060 | 1886.54 | 123.0 | 3.50 | 0.30  | 0.0365 | 0.0089  | 32.36 | 1.694 | 4.440  | 3.1349 | -0.00732 | 0.03763 | 0.00443  | -0.00233 | 0.01200 | 0.00141  | 0.00095 | 0.00231  | 0.00413 |
| 13061 | 1888.85 | 124.1 | 3.51 | 0.30  | 0.0392 | 0.0057  | 32.49 | 1.694 | 4.566  | 3.1390 | -0.00579 | 0.04152 | 0.00556  | -0.00185 | 0.01323 | 0.00177  | 0.00144 | 0.00353  | 0.00450 |
| 13062 | 1888.27 | 124.4 | 3.51 | 0.30  | 0.0406 | 0.0018  | 32.61 | 1.694 | 4.688  | 3.1367 | -0.00080 | 0.04543 | 0.00860  | -0.00025 | 0.01448 | 0.00274  | 0.00303 | 0.00479  | 0.00546 |
| 13063 | 1887.70 | 125.2 | 3.50 | 0.31  | 0.0400 | 0.0052  | 32.74 | 1.694 | 4.804  | 3.1350 | 0.00143  | 0.04474 | 0.01379  | 0.00046  | 0.01427 | 0.00440  | 0.00374 | 0.00457  | 0.00712 |
| 13064 | 1886.54 | 124.9 | 3.50 | 0.30  | 0.0417 | 0.0005  | 32.86 | 1.694 | 4.935  | 3.1345 | 0.00331  | 0.04343 | 0.01050  | 0.00105  | 0.01385 | 0.00335  | 0.00434 | 0.00416  | 0.00607 |
| 13065 | 1888.99 | 123.6 | 3.51 | 0.30  | 0.0382 | 0.0024  | 32.99 | 1.694 | 5.064  | 3.1374 | 0.00421  | 0.04266 | 0.01091  | 0.00134  | 0.01360 | 0.00348  | 0.00462 | 0.00390  | 0.00620 |
| 13066 | 1887.84 | 124.0 | 3.51 | 0.32  | 0.0382 | 0.0052  | 33.11 | 1.694 | 5.178  | 3.1365 | 0.00227  | 0.04103 | 0.00481  | 0.00072  | 0.01308 | 0.00153  | 0.00401 | 0.00338  | 0.00426 |
| 13067 | 1887.12 | 124.4 | 3.50 | 0.30  | 0.0379 | 0.0031  | 33.24 | 1.694 | 5.315  | 3.1346 | 0.00203  | 0.04331 | 0.00240  | 0.00065  | 0.01382 | 0.00077  | 0.00393 | 0.00412  | 0.00349 |
| 13068 | 1887.55 | 124.1 | 3.51 | 0.32  | 0.0386 | 0.0072  | 33.36 | 1.694 | 5.425  | 3.1377 | 0.00089  | 0.04213 | -0.00013 | 0.00028  | 0.01343 | -0.00004 | 0.00356 | 0.00373  | 0.00268 |
| 13069 | 1888.42 | 123.4 | 3.51 | 0.32  | 0.0386 | 0.0035  | 33.49 | 1.694 | 5.554  | 3.1376 | 0.00167  | 0.04444 | -0.00048 | 0.00053  | 0.01416 | -0.00015 | 0.00381 | 0.00447  | 0.00257 |
| 13070 | 1887.84 | 124.1 | 3.51 | 0.31  | 0.0358 | 0.0067  | 33.61 | 1.694 | 5.687  | 3.1350 | 0.00298  | 0.04765 | 0.00692  | 0.00095  | 0.01520 | 0.00221  | 0.00423 | 0.00550  | 0.00493 |
| 13071 | 1886.83 | 124.3 | 3.50 | 0.30  | 0.0379 | 0.0031  | 33.74 | 1.693 | 5.820  | 3.1348 | 0.00372  | 0.04733 | 0.00652  | 0.00119  | 0.01510 | 0.00208  | 0.00447 | 0.00540  | 0.00480 |
| 13072 | 1888.99 | 123.4 | 3.52 | 0.30  | 0.0382 | 0.0005  | 33.86 | 1.694 | 5.941  | 3.1391 | 0.00555  | 0.04827 | 0.00591  | 0.00177  | 0.01538 | 0.00188  | 0.00505 | 0.00568  | 0.00461 |
| 13073 | 1888.42 | 123.7 | 3.51 | 0.30  | 0.0362 | 0.0050  | 33.99 | 1.694 | 6.067  | 3.1375 | 0.00606  | 0.04709 | 0.01088  | 0.00193  | 0.01501 | 0.00347  | 0.00521 | 0.00531  | 0.00619 |
| 13074 | 1887.12 | 124.1 | 3.51 | 0.30  | 0.0352 | 0.0053  | 34.11 | 1.693 | 6.198  | 3.1352 | 0.00700  | 0.04702 | 0.01005  | 0.00223  | 0.01500 | 0.00321  | 0.00551 | 0.00530  | 0.00593 |
| 13075 | 1888.85 | 123.6 | 3.51 | 0.30  | 0.0348 | 0.0070  | 34.24 | 1.693 | 6.321  | 3.1384 | 0.00621  | 0.04708 | 0.00797  | 0.00198  | 0.01500 | 0.00254  | 0.00526 | 0.00531  | 0.00526 |
| 13076 | 1888.13 | 124.0 | 3.51 | 0.28  | 0.0341 | 0.0094  | 34.36 | 1.692 | 6.461  | 3.1373 | 0.00645  | 0.04844 | 0.00814  | 0.00206  | 0.01544 | 0.00260  | 0.00534 | 0.00574  | 0.00532 |
| 13077 | 1887.41 | 124.4 | 3.50 | 0.29  | 0.0369 | 0.0063  | 34.49 | 1.693 | 6.576  | 3.1349 | 0.00654  | 0.05297 | 0.01274  | 0.00209  | 0.01690 | 0.00406  | 0.00537 | 0.00720  | 0.00679 |
| 13078 | 1888.42 | 124.0 | 3.51 | 0.29  | 0.0327 | 0.0059  | 34.61 | 1.693 | 6.708  | 3.1376 | 0.00688  | 0.05181 | 0.01064  | 0.00219  | 0.01651 | 0.00339  | 0.00547 | 0.00682  | 0.00611 |
| 13079 | 1888.70 | 123.6 | 3.51 | 0.31  | 0.0351 | 0.0053  | 34.74 | 1.694 | 6.810  | 3.1381 | 0.01055  | 0.04929 | 0.00943  | 0.00336  | 0.01571 | 0.00301  | 0.00664 | 0.00601  | 0.00573 |
| 13080 | 1887.98 | 124.2 | 3.51 | 0.30  | 0.0331 | 0.0079  | 34.86 | 1.693 | 6.945  | 3.1371 | 0.01163  | 0.04725 | 0.00938  | 0.00371  | 0.01506 | 0.00299  | 0.00699 | 0.00536  | 0.00571 |
| 13081 | 1887.12 | 124.4 | 3.50 | 0.29  | 0.0324 | 0.0057  | 34.99 | 1.693 | 7.076  | 3.1356 | 0.01061  | 0.04704 | 0.00727  | 0.00338  | 0.01500 | 0.00232  | 0.00666 | 0.00530  | 0.00504 |
| 13082 | 1888.56 | 123.6 | 3.51 | 0.32  | 0.0358 | 0.0039  | 35.11 | 1.694 | 7.179  | 3.1373 | 0.01043  | 0.05066 | 0.01055  | 0.00332  | 0.01615 | 0.00336  | 0.00661 | 0.00645  | 0.00608 |
| 13083 | 1888.42 | 123.7 | 3.51 | 0.30  | 0.0327 | 0.0105  | 35.24 | 1.693 | 7.321  | 3.1373 | 0.00738  | 0.04883 | 0.01397  | 0.00235  | 0.01557 | 0.00445  | 0.00564 | 0.00587  | 0.00717 |
| 13084 | 1887.26 | 124.4 | 3.50 | 0.30  | 0.0290 | 0.0103  | 35.36 | 1.693 | 7.451  | 3.1347 | 0.00665  | 0.04703 | 0.01789  | 0.00212  | 0.01500 | 0.00571  | 0.00540 | 0.00531  | 0.00843 |
| 13085 | 1888.70 | 124.0 | 3.51 | 0.31  | 0.0348 | 0.0070  | 35.49 | 1.694 | 7.566  | 3.1377 | 0.00796  | 0.04625 | 0.01472  | 0.00254  | 0.01474 | 0.00469  | 0.00582 | 0.00504  | 0.00741 |
| 13086 | 1888.56 | 123.8 | 3.51 | 0.31  | 0.0358 | 0.0104  | 35.61 | 1.694 | 7.687  | 3.1381 | 0.00777  | 0.04541 | 0.01489  | 0.00248  | 0.01447 | 0.00474  | 0.00576 | 0.00477  | 0.00747 |
| 13087 | 1887.98 | 124.3 | 3.51 | 0.29  | 0.0310 | 0.0143  | 35.74 | 1.693 | 7.829  | 3.1369 | 0.00622  | 0.04154 | 0.01048  | 0.00198  | 0.01324 | 0.00334  | 0.00526 | 0.00354  | 0.00606 |
| 13088 | 1886.98 | 124.4 | 3.50 | 0.30  | 0.0321 | 0.0092  | 35.86 | 1.693 | 7.945  | 3.1349 | 0.00330  | 0.04043 | 0.01128  | 0.00105  | 0.01290 | 0.00360  | 0.00433 | 0.00320  | 0.00632 |
| 13089 | 1888.85 | 123.8 | 3.51 | 0.30  | 0.0313 | 0.0135  | 35.99 | 1.693 | 8.074  | 3.1385 | 0.00108  | 0.03870 | 0.01213  | 0.00034  | 0.01233 | 0.00387  | 0.00363 | 0.00263  | 0.00659 |
| 13090 | 1887.98 | 124.2 | 3.51 | 0.30  | 0.0338 | 0.0120  | 36.11 | 1.693 | 8.197  | 3.1364 | -0.00097 | 0.03944 | 0.01578  | -0.00031 | 0.01257 | 0.00503  | 0.00297 | 0.00288  | 0.00776 |
| 13091 | 1887.26 | 124.6 | 3.50 | 0.29  | 0.0303 | 0.0148  | 36.24 | 1.693 | 8.329  | 3.1358 | -0.00362 | 0.03398 | 0.01112  | -0.00115 | 0.01084 | 0.00355  | 0.00213 | 0.00114  | 0.00627 |
| 13092 | 1886.83 | 124.5 | 3.50 | 0.29  | 0.0290 | 0.0178  | 36.36 | 1.693 | 8.457  | 3.1346 | -0.00332 | 0.03135 | 0.01214  | -0.00106 | 0.01000 | 0.00387  | 0.00222 | 0.00030  | 0.00660 |
| 13093 | 1888.70 | 123.9 | 3.51 | 0.29  | 0.0286 | 0.0204  | 36.49 | 1.693 | 8.584  | 3.1375 | -0.00546 | 0.02887 | 0.01490  | -0.00174 | 0.00920 | 0.00475  | 0.00154 | -0.00050 | 0.00747 |
| 13094 | 1887.98 | 124.6 | 3.50 | 0.29  | 0.0338 | 0.0176  | 36.61 | 1.693 | 8.701  | 3.1375 | -0.00870 | 0.02340 | 0.01178  | -0.00277 | 0.00746 | 0.00375  | 0.00051 | -0.00224 | 0.00648 |
| 13095 | 1886.98 | 124.8 | 3.50 | 0.27  | 0.0331 | 0.0173  | 36.74 | 1.692 | 8.840  | 3.1339 | -0.00987 | 0.02101 | 0.01224  | -0.      |         |          |         |          |         |

Table A20. Concluded.

Run = 197

M = 1.60

xsppos = 42.350

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 13115 | 1887.98 | 124.6 | 3.50 | 0.29  | 0.0355 | 0.0214 | 39.24 | 1.693 | 11.326 | 3.1346 | -0.01817 | 0.01708 | -0.01635 | -0.00580 | 0.00545 | -0.00522 | -0.00252 | -0.00425 | -0.00249 |
| 13116 | 1886.54 | 124.5 | 3.50 | 0.29  | 0.0351 | 0.0231 | 39.36 | 1.693 | 11.450 | 3.1353 | -0.02074 | 0.01197 | -0.02282 | -0.00661 | 0.00382 | -0.00728 | -0.00333 | -0.00588 | -0.00456 |
| 13117 | 1888.85 | 123.6 | 3.51 | 0.31  | 0.0351 | 0.0203 | 39.49 | 1.694 | 11.563 | 3.1376 | -0.01916 | 0.01222 | -0.02255 | -0.00611 | 0.00389 | -0.00719 | -0.00283 | -0.00580 | -0.00446 |
| 13118 | 1888.42 | 124.0 | 3.51 | 0.29  | 0.0310 | 0.0264 | 39.61 | 1.692 | 11.712 | 3.1373 | -0.01795 | 0.01214 | -0.02664 | -0.00572 | 0.00387 | -0.00849 | -0.00244 | -0.00583 | -0.00577 |
| 13119 | 1887.41 | 124.3 | 3.50 | 0.29  | 0.0338 | 0.0260 | 39.74 | 1.693 | 11.824 | 3.1361 | -0.01854 | 0.01435 | -0.02595 | -0.00591 | 0.00457 | -0.00827 | -0.00263 | -0.00512 | -0.00555 |
| 13120 | 1889.28 | 123.8 | 3.51 | 0.30  | 0.0396 | 0.0171 | 39.86 | 1.694 | 11.942 | 3.1397 | -0.02039 | 0.01431 | -0.02764 | -0.00649 | 0.00456 | -0.00880 | -0.00321 | -0.00514 | -0.00608 |
| 13121 | 1888.27 | 123.8 | 3.51 | 0.29  | 0.0331 | 0.0238 | 39.99 | 1.693 | 12.082 | 3.1367 | -0.01815 | 0.02158 | -0.02250 | -0.00579 | 0.00688 | -0.00717 | -0.00250 | -0.00282 | -0.00445 |
| 13122 | 1887.84 | 124.3 | 3.51 | 0.30  | 0.0365 | 0.0229 | 40.11 | 1.694 | 12.191 | 3.1354 | -0.01836 | 0.02228 | -0.02548 | -0.00586 | 0.00711 | -0.00813 | -0.00257 | -0.00259 | -0.00540 |
| 13123 | 1886.40 | 124.4 | 3.50 | 0.30  | 0.0406 | 0.0205 | 40.24 | 1.694 | 12.312 | 3.1335 | -0.01708 | 0.02383 | -0.02315 | -0.00545 | 0.00761 | -0.00739 | -0.00217 | -0.00209 | -0.00466 |
| 13124 | 1888.85 | 123.6 | 3.51 | 0.30  | 0.0389 | 0.0186 | 40.36 | 1.694 | 12.441 | 3.1378 | -0.01592 | 0.02335 | -0.01862 | -0.00507 | 0.00744 | -0.00593 | -0.00179 | -0.00226 | -0.00321 |
| 13125 | 1888.27 | 124.3 | 3.51 | 0.29  | 0.0327 | 0.0236 | 40.49 | 1.693 | 12.583 | 3.1362 | -0.01351 | 0.02435 | -0.01474 | -0.00431 | 0.00776 | -0.00470 | -0.00102 | -0.00193 | -0.00198 |
| 13126 | 1887.12 | 124.8 | 3.50 | 0.29  | 0.0375 | 0.0207 | 40.61 | 1.693 | 12.702 | 3.1351 | -0.01538 | 0.02185 | -0.01559 | -0.00491 | 0.00697 | -0.00497 | -0.00162 | -0.00273 | -0.00225 |
| 13127 | 1888.70 | 124.0 | 3.51 | 0.28  | 0.0375 | 0.0169 | 40.74 | 1.693 | 12.834 | 3.1376 | -0.01431 | 0.02138 | -0.01690 | -0.00456 | 0.00681 | -0.00539 | -0.00128 | -0.00288 | -0.00266 |
| 13128 | 1888.56 | 123.9 | 3.51 | 0.29  | 0.0358 | 0.0178 | 40.86 | 1.693 | 12.953 | 3.1374 | -0.01642 | 0.02140 | -0.01476 | -0.00523 | 0.00682 | -0.00471 | -0.00195 | -0.00288 | -0.00198 |
| 13129 | 1887.98 | 124.5 | 3.50 | 0.29  | 0.0362 | 0.0199 | 40.99 | 1.693 | 13.073 | 3.1360 | -0.01551 | 0.01916 | -0.01444 | -0.00495 | 0.00611 | -0.00460 | -0.00167 | -0.00359 | -0.00188 |
| 13130 | 1886.54 | 124.4 | 3.50 | 0.29  | 0.0362 | 0.0227 | 41.11 | 1.693 | 13.202 | 3.1344 | -0.01902 | 0.01840 | -0.01690 | -0.00607 | 0.00587 | -0.00539 | -0.00279 | -0.00383 | -0.00267 |
| 13131 | 1889.14 | 123.5 | 3.51 | 0.30  | 0.0351 | 0.0240 | 41.24 | 1.693 | 13.318 | 3.1385 | -0.01855 | 0.01684 | -0.01699 | -0.00591 | 0.00536 | -0.00541 | -0.00263 | -0.00433 | -0.00269 |
| 13132 | 1888.42 | 124.0 | 3.51 | 0.30  | 0.0355 | 0.0223 | 41.36 | 1.694 | 13.440 | 3.1391 | -0.02081 | 0.01599 | -0.02073 | -0.00663 | 0.00509 | -0.00661 | -0.00335 | -0.00460 | -0.00388 |
| 13133 | 1887.41 | 124.7 | 3.50 | 0.28  | 0.0348 | 0.0219 | 41.49 | 1.693 | 13.583 | 3.1362 | -0.01943 | 0.01935 | -0.01950 | -0.00620 | 0.00636 | -0.00622 | -0.00291 | -0.00334 | -0.00349 |
| 13134 | 1888.85 | 124.0 | 3.51 | 0.30  | 0.0365 | 0.0182 | 41.62 | 1.693 | 13.696 | 3.1392 | -0.01736 | 0.02467 | -0.01997 | -0.00553 | 0.00786 | -0.00636 | -0.00225 | -0.00184 | -0.00364 |
| 13135 | 1888.70 | 123.6 | 3.51 | 0.29  | 0.0348 | 0.0210 | 41.74 | 1.693 | 13.829 | 3.1378 | -0.01269 | 0.02802 | -0.01863 | -0.00404 | 0.00893 | -0.00594 | -0.00076 | -0.00077 | -0.00321 |
| 13136 | 1887.84 | 124.3 | 3.51 | 0.29  | 0.0344 | 0.0227 | 41.86 | 1.693 | 13.954 | 3.1376 | -0.01134 | 0.02554 | -0.01782 | -0.00362 | 0.00814 | -0.00568 | -0.00033 | -0.00156 | -0.00296 |
| 13137 | 1887.12 | 124.1 | 3.51 | 0.30  | 0.0372 | 0.0149 | 41.99 | 1.693 | 14.071 | 3.1358 | -0.01134 | 0.02587 | -0.01980 | -0.00362 | 0.00825 | -0.00631 | -0.00033 | -0.00145 | -0.00359 |
| 13138 | 1888.27 | 123.3 | 3.51 | 0.29  | 0.0365 | 0.0145 | 42.11 | 1.693 | 14.202 | 3.1387 | -0.01394 | 0.02054 | -0.02263 | -0.00444 | 0.00655 | -0.00721 | -0.00116 | -0.00315 | -0.00449 |
| 13139 | 1888.27 | 123.9 | 3.51 | 0.27  | 0.0365 | 0.0117 | 42.24 | 1.692 | 14.337 | 3.1388 | -0.01773 | 0.01938 | -0.02323 | -0.00565 | 0.00617 | -0.00740 | -0.00237 | -0.00352 | -0.00468 |
| 13140 | 1886.98 | 124.4 | 3.50 | 0.28  | 0.0348 | 0.0164 | 42.36 | 1.693 | 14.458 | 3.1363 | -0.01750 | 0.01712 | -0.02407 | -0.00558 | 0.00546 | -0.00767 | -0.00230 | -0.00424 | -0.00495 |
| 13141 | 1888.99 | 123.7 | 3.51 | 0.31  | 0.0392 | 0.0095 | 42.49 | 1.694 | 14.563 | 3.1387 | -0.01852 | 0.02074 | -0.02192 | -0.00590 | 0.00661 | -0.00698 | -0.00262 | -0.00309 | -0.00426 |
| 13142 | 1888.13 | 123.8 | 3.51 | 0.28  | 0.0358 | 0.0150 | 42.61 | 1.693 | 14.706 | 3.1378 | -0.01881 | 0.02632 | -0.02087 | -0.00600 | 0.00839 | -0.00665 | -0.00271 | -0.00131 | -0.00393 |
| 13143 | 1887.55 | 124.5 | 3.50 | 0.29  | 0.0345 | 0.0143 | 42.74 | 1.693 | 14.828 | 3.1359 | -0.01281 | 0.03116 | -0.01429 | -0.00409 | 0.00994 | -0.00456 | -0.00080 | 0.00024  | -0.00183 |
| 13144 | 1888.70 | 124.0 | 3.51 | 0.30  | 0.0355 | 0.0074 | 42.86 | 1.693 | 14.943 | 3.1396 | -0.01103 | 0.03086 | -0.01354 | -0.00351 | 0.00983 | -0.00431 | -0.00023 | 0.00013  | -0.00159 |
| 13145 | 1888.42 | 123.6 | 3.51 | 0.29  | 0.0344 | 0.0106 | 42.99 | 1.693 | 15.076 | 3.1383 | -0.00951 | 0.03314 | -0.00939 | -0.00303 | 0.01056 | -0.00299 | 0.00025  | 0.00086  | -0.00027 |
| 13146 | 1887.84 | 124.2 | 3.51 | 0.29  | 0.0348 | 0.0107 | 43.11 | 1.693 | 15.199 | 3.1368 | -0.01088 | 0.03185 | -0.01191 | -0.00347 | 0.01015 | -0.00380 | -0.00019 | 0.00046  | -0.00107 |
| 13147 | 1887.41 | 124.4 | 3.50 | 0.29  | 0.0355 | 0.0111 | 43.24 | 1.693 | 15.327 | 3.1359 | -0.00816 | 0.03060 | -0.01612 | -0.00260 | 0.00976 | -0.00514 | 0.00068  | 0.00006  | -0.00242 |
| 13148 | 1888.85 | 123.8 | 3.51 | 0.30  | 0.0362 | 0.0087 | 43.36 | 1.693 | 15.446 | 3.1384 | -0.00943 | 0.03024 | -0.01617 | -0.00300 | 0.00964 | -0.00515 | 0.00028  | -0.00006 | -0.00243 |
| 13149 | 1888.27 | 124.2 | 3.51 | 0.29  | 0.0382 | 0.0052 | 43.49 | 1.693 | 15.575 | 3.1373 | -0.00893 | 0.03062 | -0.01378 | -0.00285 | 0.00976 | -0.00439 | 0.00044  | 0.00006  | -0.00167 |
| 13150 | 1887.12 | 124.6 | 3.50 | 0.29  | 0.0321 | 0.0111 | 43.61 | 1.693 | 15.703 | 3.1354 | -0.01117 | 0.02845 | -0.01577 | -0.00356 | 0.00907 | -0.00503 | -0.00028 | -0.00062 | -0.00231 |
| 13151 | 1888.42 | 124.0 | 3.51 | 0.29  | 0.0348 | 0.0126 | 43.74 | 1.693 | 15.825 | 3.1387 | -0.01080 | 0.02853 | -0.01181 | -0.00344 | 0.00909 | -0.00376 | -0.00016 | -0.00061 | -0.00104 |
| 13152 | 1888.42 | 123.8 | 3.51 | 0.30  | 0.0338 | 0.0092 | 43.86 | 1.693 | 15.944 | 3.1376 | -0.01184 | 0.02807 | -0.00503 | -0.00377 | 0.00894 | -0.00160 | -0.00049 | -0.00075 | 0.00112  |
| 13153 | 1887.84 | 124.2 | 3.51 | 0.31  | 0.0358 | 0.0094 | 43.99 | 1.694 | 16.062 | 3.1356 | -0.00982 | 0.03076 | -0.00837 | -0.00313 | 0.00981 | -0.00267 | 0.00015  | 0.00011  | 0.00005  |
| 13154 | 1886.83 | 124.3 | 3.50 | 0.29  | 0.0358 | 0.0104 | 44.11 | 1.693 | 16.197 | 3.1367 | -0.01287 | 0.02665 | -0.00445 | -0.00410 | 0.00850 | -0.00142 | -0.00082 | -0.00120 | 0.00131  |
| 13155 | 1888.56 | 123.7 | 3.51 | 0.29  | 0.0351 | 0.0100 | 44.24 | 1.693 | 16.324 | 3.1386 | -0.01265 | 0.02844 | -0.00222 | -0.00403 | 0.00906 | -0.00071 | -0.00075 | -0.00063 | 0.00202  |
| 13156 | 1888.13 | 124.3 | 3.51 | 0.30  | 0.0358 | 0.0113 | 44.36 | 1.693 | 16.443 | 3.1359 | -0.01104 | 0.02964 | -0.00180 | -0.00352 | 0.00945 | -0.00057 | -0.00024 | -0.00024 | 0.00215  |
| 13157 | 1886.98 | 124.7 | 3.50 | 0.29  | 0.0314 | 0.0154 | 44.49 | 1.693 | 16.582 | 3.1343 | -0.01167 | 0.02941 | -0.00289 | -0.00372 | 0.00938 | -0.00092 | -0.00044 | -0.00031 | 0.00180  |
| 13158 | 1889.14 | 123.9 | 3.51 | 0.30  | 0.0320 | 0.0148 | 44.61 | 1.693 | 16.696 | 3.1380 | -0.01096 | 0.02992 | -0.00294 | -0.00349 | 0.00953 | -0.00094 | -0.00021 | -0.00016 | 0.00179  |
| 13159 | 1888.27 | 123.8 | 3.51 | 0.30  | 0.0355 | 0.0102 | 44.74 | 1.693 | 16.818 | 3.1376 | -0.01079 | 0.02899 | -0.00440 | -0.00344 | 0.00924 | -0.00140 | -0.00016 | -0.00046 | 0.00132  |
| 13160 | 1887.84 | 124.4 | 3.50 | 0.30  | 0.0341 | 0.0122 | 44.86 | 1.693 | 16.945 | 3.1359 | -0.01067 | 0.02960 | -0.00625 | -0.00340 | 0.00944 | -0.00199 | -0.00012 | -0.00026 | 0.00073  |
| 13161 | 1886.54 | 124.4 | 3.50 | 0.29  | 0.0355 | 0.0167 | 44.99 | 1.693 | 17.073 | 3.1339 | -0.00977 | 0.03086 | -0.00634 | -0.00312 | 0.00985 | -0.00202 | 0.00016  | 0.00015  | 0.00070  |
| 13162 | 1888.70 | 123.9 | 3.51 | 0.31  | 0.0303 | 0.0185 | 45.11 | 1.693 | 17.193 | 3.1381 | -0.01145 | 0.02903 | -0.00616 | -0.00365 | 0.00925 | -0.00196 | -0.00037 | -0.00045 | 0.00076  |
| 13163 | 1888.27 | 124.3 | 3.51 | 0.31  | 0.0341 | 0.0113 | 45.24 | 1.694 | 17.313 | 3.1369 | -0.01065 | 0.02942 | -0.00458 | -0.00340 | 0.00938 | -0.00146 | -0.00011 | -0.00032 | 0.00126  |
| 13164 | 1887.12 | 124.7 | 3.50 | 0.30  | 0.0327 | 0.0143 | 45.36 | 1.693 | 17.445 | 3.1358 | -0.00992 | 0.02993 | -0.00510 | -0.00316 | 0.00954 | -0.00163 | 0.00012  | -0.00015 | 0.00110  |
| 13165 | 1889.14 | 124.1 | 3.51 | 0.29  | 0.0348 | 0.0089 | 45.49 | 1.693 | 17.577 | 3.1395 | -0.01189 | 0.02898 | -0.00592 | -0.00379 | 0.00923 | -0.00188 | -0.00050 | -0.00047 | 0.00084  |
| 13166 | 1888.70 | 123.9 | 3.51 | 0.31  | 0.0320 | 0.0111 | 45.61 | 1.694 | 17.693 | 3.1362 | -0.01070 | 0.03196 | 0.00072  | -0.00341 | 0.01019 | 0.00023  | -0.00013 | 0.00049  | 0.00295  |
| 13167 | 1887.55 | 124.4 | 3.50 | 0.29  | 0.0345 | 0.0106 | 45.74 | 1.693 | 17.827 | 3.1370 | -0.01298 | 0.02862 | -0.00567 | -0.00414 | 0.00912 | -0.00181 | -0.00085 | -0.00057 | 0.00092  |
| 13168 | 1886.40 |       |      |       |        |        |       |       |        |        |          |         |          |          |         |          |          |          |          |

Table A21. Run 198.

Run = 198

M = 1.60

xsp05 = 42.350

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 13174 | 1887.98 | 124.1 | 3.51 | 0.66  | 0.0482 | 0.0144 | 21.36 | 1.690 | -6.502 | 3.1367 | -0.01095 | 0.02894 | -0.01009 | -0.00349 | 0.00923 | -0.00322 | -0.00016 | -0.00019 | -0.00043 |
| 13175 | 1886.83 | 124.5 | 3.50 | 0.66  | 0.0482 | 0.0135 | 21.49 | 1.690 | -6.375 | 3.1351 | -0.01072 | 0.02891 | -0.00878 | -0.00342 | 0.00922 | -0.00280 | -0.00009 | -0.00020 | -0.00002 |
| 13176 | 1889.57 | 123.6 | 3.51 | 0.66  | 0.0492 | 0.0056 | 21.61 | 1.690 | -6.251 | 3.1401 | -0.01069 | 0.02886 | -0.01021 | -0.00341 | 0.00919 | -0.00325 | -0.00007 | -0.00023 | -0.00046 |
| 13177 | 1888.42 | 123.8 | 3.51 | 0.66  | 0.0502 | 0.0052 | 21.74 | 1.690 | -6.131 | 3.1374 | -0.01088 | 0.03083 | -0.00714 | -0.00347 | 0.00983 | -0.00228 | -0.00013 | 0.00041  | 0.00051  |
| 13178 | 1887.12 | 124.3 | 3.50 | 0.66  | 0.0503 | 0.0043 | 21.86 | 1.690 | -6.005 | 3.1345 | -0.00903 | 0.03018 | -0.00748 | -0.00288 | 0.00963 | -0.00239 | 0.00045  | 0.00021  | 0.00040  |
| 13179 | 1888.99 | 124.0 | 3.51 | 0.66  | 0.0492 | 0.0056 | 21.99 | 1.690 | -5.881 | 3.1391 | -0.01064 | 0.02941 | -0.00949 | -0.00339 | 0.00937 | -0.00302 | -0.00006 | -0.00005 | -0.00024 |
| 13180 | 1888.56 | 123.8 | 3.51 | 0.66  | 0.0495 | 0.0095 | 22.11 | 1.690 | -5.754 | 3.1373 | -0.01071 | 0.03033 | -0.00360 | -0.00341 | 0.00967 | -0.00115 | -0.00008 | 0.00025  | 0.00164  |
| 13181 | 1887.84 | 124.4 | 3.51 | 0.66  | 0.0506 | 0.0148 | 22.24 | 1.690 | -5.631 | 3.1365 | -0.01016 | 0.02958 | -0.00814 | -0.00324 | 0.00943 | -0.00259 | 0.00009  | 0.00001  | 0.00019  |
| 13182 | 1886.98 | 124.4 | 3.50 | 0.65  | 0.0451 | 0.0164 | 22.36 | 1.690 | -5.498 | 3.1352 | -0.01074 | 0.02829 | -0.00623 | -0.00343 | 0.00902 | -0.00199 | -0.00009 | -0.00039 | 0.00080  |
| 13183 | 1888.56 | 123.6 | 3.51 | 0.66  | 0.0502 | 0.0174 | 22.49 | 1.690 | -5.382 | 3.1385 | -0.01119 | 0.02976 | -0.00932 | -0.00356 | 0.00948 | -0.00297 | -0.00023 | 0.00006  | -0.00018 |
| 13184 | 1888.13 | 124.1 | 3.51 | 0.66  | 0.0447 | 0.0237 | 22.61 | 1.690 | -5.248 | 3.1364 | -0.01028 | 0.02967 | -0.00509 | -0.00328 | 0.00946 | -0.00162 | 0.00006  | 0.00004  | 0.00116  |
| 13185 | 1887.12 | 124.6 | 3.50 | 0.66  | 0.0475 | 0.0215 | 22.74 | 1.690 | -5.129 | 3.1346 | -0.00964 | 0.03003 | -0.00821 | -0.00308 | 0.00958 | -0.00262 | 0.00026  | 0.00016  | 0.00017  |
| 13186 | 1889.42 | 123.9 | 3.51 | 0.66  | 0.0454 | 0.0259 | 22.86 | 1.690 | -4.988 | 3.1395 | -0.00962 | 0.02870 | -0.00811 | -0.00307 | 0.00914 | -0.00258 | 0.00027  | -0.00028 | 0.00020  |
| 13187 | 1888.42 | 124.0 | 3.51 | 0.65  | 0.0457 | 0.0326 | 22.99 | 1.690 | -4.870 | 3.1381 | -0.01147 | 0.02941 | -0.00989 | -0.00366 | 0.00937 | -0.00315 | -0.00032 | -0.00005 | -0.00037 |
| 13188 | 1887.84 | 124.5 | 3.50 | 0.65  | 0.0458 | 0.0280 | 23.11 | 1.690 | -4.744 | 3.1355 | -0.01108 | 0.03119 | -0.00478 | -0.00353 | 0.00995 | -0.00152 | -0.00020 | 0.00053  | 0.00126  |
| 13189 | 1886.83 | 124.4 | 3.50 | 0.65  | 0.0447 | 0.0330 | 23.24 | 1.690 | -4.619 | 3.1353 | -0.01142 | 0.02923 | -0.00837 | -0.00364 | 0.00932 | -0.00267 | -0.00031 | -0.00010 | 0.00012  |
| 13190 | 1888.70 | 123.6 | 3.51 | 0.65  | 0.0430 | 0.0330 | 23.36 | 1.690 | -4.495 | 3.1384 | -0.01055 | 0.02939 | -0.00638 | -0.00336 | 0.00936 | -0.00203 | -0.00003 | -0.00005 | 0.00075  |
| 13191 | 1888.42 | 124.3 | 3.51 | 0.65  | 0.0444 | 0.0235 | 23.49 | 1.690 | -4.371 | 3.1376 | -0.01178 | 0.02839 | -0.00595 | -0.00376 | 0.00905 | -0.00190 | -0.00042 | -0.00037 | 0.00089  |
| 13192 | 1886.98 | 124.7 | 3.50 | 0.66  | 0.0482 | 0.0237 | 23.61 | 1.690 | -4.252 | 3.1348 | -0.01128 | 0.02954 | -0.00729 | -0.00360 | 0.00942 | -0.00233 | -0.00026 | 0.00001  | 0.00046  |
| 13193 | 1888.99 | 123.8 | 3.51 | 0.66  | 0.0495 | 0.0179 | 23.74 | 1.690 | -4.129 | 3.1381 | -0.00977 | 0.03089 | -0.00625 | -0.00311 | 0.00984 | -0.00199 | 0.00022  | 0.00042  | 0.00080  |
| 13194 | 1888.56 | 123.9 | 3.51 | 0.66  | 0.0495 | 0.0179 | 23.86 | 1.690 | -4.004 | 3.1378 | -0.01091 | 0.02955 | -0.00654 | -0.00348 | 0.00942 | -0.00209 | -0.00014 | 0.00000  | 0.00070  |
| 13195 | 1887.26 | 124.6 | 3.50 | 0.66  | 0.0482 | 0.0125 | 23.99 | 1.690 | -3.898 | 3.1395 | -0.01161 | 0.02842 | -0.00972 | -0.00370 | 0.00906 | -0.00310 | -0.00037 | -0.00036 | -0.00031 |
| 13196 | 1886.98 | 124.3 | 3.50 | 0.66  | 0.0485 | 0.0108 | 24.11 | 1.690 | -3.758 | 3.1358 | -0.01086 | 0.02899 | -0.00889 | -0.00346 | 0.00924 | -0.00283 | -0.00013 | -0.00017 | -0.00005 |
| 13197 | 1888.27 | 123.5 | 3.51 | 0.66  | 0.0492 | 0.0093 | 24.24 | 1.691 | -3.633 | 3.1366 | -0.01001 | 0.02963 | -0.00829 | -0.00319 | 0.00945 | -0.00264 | 0.00014  | 0.00003  | 0.00014  |
| 13198 | 1887.98 | 124.0 | 3.51 | 0.66  | 0.0523 | 0.0092 | 24.36 | 1.691 | -3.513 | 3.1356 | -0.00968 | 0.03059 | -0.00696 | -0.00309 | 0.00976 | -0.00222 | 0.00025  | 0.00034  | 0.00057  |
| 13199 | 1887.12 | 124.4 | 3.50 | 0.66  | 0.0454 | 0.0157 | 24.49 | 1.690 | -3.376 | 3.1344 | -0.01002 | 0.03132 | -0.00660 | -0.00320 | 0.00999 | -0.00210 | 0.00014  | 0.00057  | 0.00068  |
| 13200 | 1888.85 | 123.8 | 3.51 | 0.66  | 0.0447 | 0.0218 | 24.61 | 1.690 | -3.249 | 3.1384 | -0.00975 | 0.03260 | -0.00880 | -0.00311 | 0.01039 | -0.00280 | 0.00023  | 0.00097  | -0.00002 |
| 13201 | 1888.27 | 123.7 | 3.51 | 0.66  | 0.0468 | 0.0164 | 24.74 | 1.690 | -3.131 | 3.1371 | -0.00969 | 0.03408 | -0.00537 | -0.00309 | 0.01086 | -0.00171 | 0.00024  | 0.00145  | 0.00108  |
| 13202 | 1887.84 | 124.3 | 3.51 | 0.66  | 0.0478 | 0.0179 | 24.86 | 1.690 | -3.007 | 3.1373 | -0.00906 | 0.02959 | -0.01127 | -0.00289 | 0.00943 | -0.00359 | 0.00045  | 0.00001  | -0.00080 |
| 13203 | 1886.83 | 124.2 | 3.50 | 0.66  | 0.0496 | 0.0095 | 24.99 | 1.690 | -2.876 | 3.1337 | -0.00570 | 0.03056 | -0.00643 | -0.00182 | 0.00975 | -0.00205 | 0.00151  | 0.00033  | 0.00073  |
| 13204 | 1888.70 | 123.8 | 3.51 | 0.66  | 0.0482 | 0.0116 | 25.11 | 1.690 | -2.755 | 3.1380 | -0.00897 | 0.02897 | -0.00833 | -0.00286 | 0.00923 | -0.00266 | 0.00048  | -0.00019 | 0.00013  |
| 13205 | 1887.98 | 124.1 | 3.51 | 0.65  | 0.0451 | 0.0164 | 25.24 | 1.690 | -2.621 | 3.1360 | -0.01166 | 0.02911 | -0.00527 | -0.00372 | 0.00928 | -0.00168 | -0.00039 | -0.00014 | 0.00110  |
| 13206 | 1887.26 | 124.4 | 3.50 | 0.65  | 0.0447 | 0.0181 | 25.36 | 1.690 | -2.491 | 3.1346 | -0.01094 | 0.03069 | -0.00479 | -0.00349 | 0.00979 | -0.00153 | -0.00016 | 0.00037  | 0.00126  |
| 13207 | 1888.85 | 123.8 | 3.51 | 0.66  | 0.0474 | 0.0261 | 25.49 | 1.690 | -2.376 | 3.1374 | -0.00897 | 0.03283 | -0.00771 | -0.00286 | 0.01046 | -0.00246 | 0.00048  | 0.00104  | 0.00033  |
| 13208 | 1888.13 | 123.8 | 3.51 | 0.65  | 0.0423 | 0.0298 | 25.61 | 1.690 | -2.243 | 3.1369 | -0.00827 | 0.03544 | -0.00747 | -0.00264 | 0.01130 | -0.00238 | 0.00070  | 0.00188  | 0.00041  |
| 13209 | 1887.70 | 124.4 | 3.50 | 0.65  | 0.0458 | 0.0261 | 25.74 | 1.690 | -2.122 | 3.1367 | -0.00978 | 0.03763 | -0.00390 | -0.00312 | 0.01200 | -0.00124 | 0.00022  | 0.00258  | 0.00154  |
| 13210 | 1886.69 | 124.1 | 3.50 | 0.65  | 0.0461 | 0.0235 | 25.86 | 1.690 | -1.998 | 3.1346 | -0.00346 | 0.03720 | -0.00336 | -0.00110 | 0.01187 | -0.00107 | 0.00223  | 0.00245  | 0.00171  |
| 13211 | 1888.99 | 123.5 | 3.51 | 0.65  | 0.0457 | 0.0261 | 25.99 | 1.690 | -1.871 | 3.1387 | -0.00280 | 0.03549 | -0.00561 | -0.00089 | 0.01131 | -0.00179 | 0.00244  | 0.00189  | 0.00100  |
| 13212 | 1888.27 | 124.0 | 3.51 | 0.66  | 0.0427 | 0.0263 | 26.11 | 1.690 | -1.746 | 3.1364 | -0.00544 | 0.02992 | -0.00303 | -0.00174 | 0.00954 | -0.00097 | 0.00160  | 0.00012  | 0.00182  |
| 13213 | 1887.12 | 124.4 | 3.50 | 0.65  | 0.0454 | 0.0213 | 26.24 | 1.690 | -1.622 | 3.1363 | -0.00775 | 0.02623 | -0.00873 | -0.00247 | 0.00836 | -0.00278 | 0.00086  | -0.00105 | 0.00000  |
| 13214 | 1888.99 | 123.7 | 3.51 | 0.66  | 0.0468 | 0.0211 | 26.36 | 1.690 | -1.500 | 3.1380 | -0.00996 | 0.02711 | -0.01128 | -0.00317 | 0.00864 | -0.00360 | 0.00016  | -0.00078 | -0.00081 |
| 13215 | 1888.56 | 124.0 | 3.51 | 0.66  | 0.0447 | 0.0190 | 26.49 | 1.690 | -1.374 | 3.1375 | -0.01313 | 0.02726 | -0.00896 | -0.00418 | 0.00869 | -0.00286 | -0.00085 | -0.00073 | -0.00007 |
| 13216 | 1887.70 | 124.7 | 3.50 | 0.66  | 0.0458 | 0.0168 | 26.61 | 1.690 | -1.254 | 3.1356 | -0.01342 | 0.03123 | -0.00867 | -0.00428 | 0.00996 | -0.00277 | -0.00095 | 0.00054  | 0.00002  |
| 13217 | 1886.98 | 124.9 | 3.50 | 0.65  | 0.0430 | 0.0172 | 26.74 | 1.690 | -1.119 | 3.1349 | -0.00936 | 0.03581 | -0.00540 | -0.00299 | 0.01142 | -0.00172 | 0.00035  | 0.00200  | 0.00106  |
| 13218 | 1888.85 | 124.1 | 3.51 | 0.66  | 0.0461 | 0.0207 | 26.86 | 1.690 | -1.002 | 3.1390 | -0.00735 | 0.03918 | -0.00529 | -0.00234 | 0.01248 | -0.00169 | 0.00099  | 0.00306  | 0.00110  |
| 13219 | 1888.27 | 124.6 | 3.50 | 0.66  | 0.0451 | 0.0220 | 26.99 | 1.690 | -0.875 | 3.1363 | -0.00169 | 0.04079 | -0.00058 | -0.00054 | 0.01301 | -0.00018 | 0.00279  | 0.00359  | 0.00260  |
| 13220 | 1886.98 | 125.2 | 3.50 | 0.66  | 0.0437 | 0.0241 | 27.11 | 1.690 | -0.749 | 3.1360 | -0.00130 | 0.03690 | -0.00409 | -0.00041 | 0.01177 | -0.00131 | 0.00292  | 0.00235  | 0.00148  |
| 13221 | 1887.55 | 124.5 | 3.50 | 0.65  | 0.0441 | 0.0186 | 27.24 | 1.690 | -0.621 | 3.1365 | -0.00150 | 0.03300 | -0.00259 | -0.00048 | 0.01052 | -0.00083 | 0.00285  | 0.00110  | 0.00196  |
| 13222 | 1888.42 | 124.0 | 3.51 | 0.66  | 0.0475 | 0.0149 | 27.36 | 1.690 | -0.505 | 3.1365 | -0.00523 | 0.02966 | -0.00262 | -0.00167 | 0.00946 | -0.00083 | 0.00166  | 0.00004  | 0.00195  |
| 13223 | 1887.70 | 124.8 | 3.50 | 0.66  | 0.0451 | 0.0173 | 27.49 | 1.690 | -0.372 | 3.1350 | -0.00475 | 0.03000 | -0.00556 | -0.00152 | 0.00957 | -0.00177 | 0.00182  | 0.00015  | 0.00101  |
| 13224 | 1886.69 | 124.9 | 3.50 | 0.66  | 0.0461 | 0.0133 | 27.61 | 1.690 | -0.254 | 3.1343 | -0.01204 | 0.02785 | -0.00869 | -0.00384 | 0.00888 | -0.00277 | -0.00051 | -0.00053 | 0.00001  |
| 13225 | 1889.14 | 123.8 | 3.51 | 0.67  | 0.0485 | 0.0080 | 27.74 | 1.691 | -0.136 | 3.1399 | -0.01392 | 0.03148 | -0.01014 | -0.00443 | 0.01003 | -0.00323 | -0.00110 | 0.00061  | -0.00044 |
| 13226 | 1888.27 | 123.7 | 3.51 | 0.66  | 0.0468 | 0.0127 | 27.86 | 1.690 | -0.004 | 3.1366 | -0.00992 | 0.03770 | -0.00663 | -0.00316 | 0.01202 | -0.00211 | 0.00017  | 0.00260  | 0.00067  |
| 13227 | 1887.26 | 124.6 | 3.50 | 0.66  | 0.0461 | 0.010  |       |       |        |        |          |         |          |          |         |          |          |          |          |

Table A21. Continued.

Run = 198

M = 1.60

xsppos = 42.350

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc   | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c  |
|-------|---------|-------|------|-------|--------|---------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|---------|
| 13247 | 1888.42 | 123.9 | 3.51 | 0.67  | 0.0489 | -0.0039 | 30.49 | 1.691 | 2.612  | 3.1377 | -0.00215 | 0.03794 | 0.00685  | -0.00069 | 0.01209 | 0.00218  | 0.00265  | 0.00267  | 0.00497 |
| 13248 | 1887.41 | 124.3 | 3.51 | 0.67  | 0.0499 | -0.0033 | 30.69 | 1.691 | 2.813  | 3.1370 | -0.00110 | 0.03646 | 0.00318  | -0.00035 | 0.01162 | 0.00101  | 0.00298  | 0.00220  | 0.00380 |
| 13249 | 1887.12 | 124.2 | 3.50 | 0.67  | 0.0496 | -0.0073 | 30.74 | 1.691 | 2.862  | 3.1344 | -0.00098 | 0.03826 | 0.00971  | -0.00031 | 0.01221 | 0.00310  | 0.00302  | 0.00279  | 0.00589 |
| 13250 | 1888.56 | 123.6 | 3.51 | 0.67  | 0.0520 | -0.0069 | 30.86 | 1.691 | 2.988  | 3.1384 | -0.00246 | 0.03776 | 0.00304  | -0.00079 | 0.01203 | 0.00097  | 0.00255  | 0.00261  | 0.00375 |
| 13251 | 1888.42 | 124.0 | 3.51 | 0.67  | 0.0485 | -0.0069 | 30.99 | 1.691 | 3.115  | 3.1366 | -0.00120 | 0.04125 | 0.00547  | -0.00038 | 0.01315 | 0.00174  | 0.00295  | 0.00373  | 0.00453 |
| 13252 | 1887.12 | 124.5 | 3.50 | 0.66  | 0.0510 | -0.0028 | 31.11 | 1.691 | 3.241  | 3.1351 | -0.00228 | 0.04114 | 0.00065  | -0.00073 | 0.01312 | 0.00021  | 0.00261  | 0.00370  | 0.00299 |
| 13253 | 1889.14 | 123.9 | 3.51 | 0.67  | 0.0540 | -0.0048 | 31.24 | 1.691 | 3.358  | 3.1390 | 0.00084  | 0.04595 | 0.00038  | 0.00027  | 0.01464 | 0.00012  | 0.00360  | 0.00522  | 0.00291 |
| 13254 | 1888.42 | 123.7 | 3.51 | 0.67  | 0.0544 | -0.0046 | 31.36 | 1.691 | 3.483  | 3.1385 | 0.00054  | 0.04862 | 0.00087  | 0.00017  | 0.01549 | 0.00028  | 0.00351  | 0.00607  | 0.00306 |
| 13255 | 1887.98 | 124.2 | 3.51 | 0.67  | 0.0557 | -0.0057 | 31.49 | 1.691 | 3.605  | 3.1368 | 0.00301  | 0.04802 | 0.00219  | 0.00096  | 0.01531 | 0.00070  | 0.00429  | 0.00589  | 0.00348 |
| 13256 | 1887.41 | 124.6 | 3.50 | 0.67  | 0.0530 | -0.0054 | 31.61 | 1.691 | 3.733  | 3.1364 | 0.00799  | 0.04292 | 0.00362  | 0.00255  | 0.01368 | 0.00115  | 0.00588  | 0.00426  | 0.00394 |
| 13257 | 1888.99 | 124.0 | 3.51 | 0.68  | 0.0530 | -0.0035 | 31.74 | 1.691 | 3.854  | 3.1393 | 0.00709  | 0.03882 | 0.00285  | 0.00226  | 0.01237 | 0.00091  | 0.00559  | 0.00295  | 0.00369 |
| 13258 | 1888.42 | 123.9 | 3.51 | 0.68  | 0.0537 | -0.0078 | 31.86 | 1.691 | 3.975  | 3.1368 | 0.00358  | 0.03523 | 0.00371  | 0.00114  | 0.01123 | 0.00118  | 0.00447  | 0.00181  | 0.00397 |
| 13259 | 1887.55 | 124.4 | 3.50 | 0.66  | 0.0510 | -0.0056 | 31.99 | 1.691 | 4.114  | 3.1362 | 0.00169  | 0.03281 | 0.00169  | -0.00054 | 0.01046 | 0.00054  | 0.00280  | 0.00104  | 0.00333 |
| 13260 | 1886.98 | 124.4 | 3.50 | 0.67  | 0.0568 | -0.0052 | 32.11 | 1.691 | 4.228  | 3.1350 | -0.00323 | 0.03562 | 0.00142  | -0.00103 | 0.01136 | 0.00045  | 0.00230  | 0.00194  | 0.00324 |
| 13261 | 1888.56 | 123.7 | 3.51 | 0.67  | 0.0533 | -0.0080 | 32.24 | 1.691 | 4.361  | 3.1389 | -0.00705 | 0.03818 | 0.00572  | -0.00225 | 0.01216 | 0.00182  | 0.00109  | 0.00274  | 0.00461 |
| 13262 | 1888.13 | 124.3 | 3.51 | 0.67  | 0.0564 | -0.0128 | 32.36 | 1.691 | 4.482  | 3.1371 | -0.00503 | 0.04145 | 0.00630  | -0.00160 | 0.01321 | 0.00201  | 0.00173  | 0.00379  | 0.00479 |
| 13263 | 1887.12 | 124.8 | 3.50 | 0.67  | 0.0558 | -0.0085 | 32.49 | 1.691 | 4.604  | 3.1350 | -0.00056 | 0.04485 | 0.01058  | -0.00018 | 0.01431 | 0.00338  | 0.00315  | 0.00489  | 0.00616 |
| 13264 | 1888.85 | 124.2 | 3.51 | 0.67  | 0.0564 | -0.0119 | 32.61 | 1.691 | 4.729  | 3.1390 | 0.00304  | 0.04517 | 0.01168  | 0.00097  | 0.01439 | 0.00372  | 0.00430  | 0.00497  | 0.00651 |
| 13265 | 1888.13 | 123.9 | 3.51 | 0.67  | 0.0530 | -0.0082 | 32.74 | 1.691 | 4.859  | 3.1373 | 0.00464  | 0.04152 | 0.00980  | 0.00148  | 0.01324 | 0.00312  | 0.00481  | 0.00382  | 0.00591 |
| 13266 | 1887.55 | 124.5 | 3.50 | 0.67  | 0.0534 | -0.0080 | 32.86 | 1.691 | 4.985  | 3.1373 | 0.00274  | 0.04071 | 0.00895  | 0.00087  | 0.01297 | 0.00285  | 0.00421  | 0.00356  | 0.00564 |
| 13267 | 1886.83 | 124.7 | 3.50 | 0.67  | 0.0541 | -0.0104 | 32.99 | 1.691 | 5.108  | 3.1350 | 0.00184  | 0.04252 | 0.00733  | 0.00059  | 0.01356 | 0.00234  | 0.00392  | 0.00414  | 0.00513 |
| 13268 | 1888.99 | 123.6 | 3.51 | 0.67  | 0.0564 | -0.0137 | 33.11 | 1.691 | 5.226  | 3.1396 | 0.00158  | 0.04235 | 0.00306  | 0.00050  | 0.01349 | 0.00097  | 0.00384  | 0.00407  | 0.00376 |
| 13269 | 1888.27 | 124.2 | 3.51 | 0.67  | 0.0551 | -0.0117 | 33.24 | 1.691 | 5.357  | 3.1385 | 0.00186  | 0.04417 | -0.00105 | 0.00059  | 0.01407 | -0.00033 | 0.00393  | 0.00465  | 0.00245 |
| 13270 | 1887.12 | 124.9 | 3.50 | 0.68  | 0.0551 | -0.0089 | 33.36 | 1.691 | 5.477  | 3.1349 | 0.00443  | 0.04677 | -0.00071 | 0.00141  | 0.01492 | -0.00023 | 0.00475  | 0.00550  | 0.00256 |
| 13271 | 1887.12 | 124.3 | 3.50 | 0.67  | 0.0520 | -0.0125 | 33.49 | 1.691 | 5.611  | 3.1360 | 0.00733  | 0.04777 | 0.00626  | 0.00234  | 0.01523 | 0.00200  | 0.00567  | 0.00581  | 0.00478 |
| 13272 | 1888.85 | 123.6 | 3.51 | 0.67  | 0.0509 | -0.0074 | 33.61 | 1.691 | 5.737  | 3.1389 | 0.00670  | 0.04888 | 0.00674  | 0.00213  | 0.01557 | 0.00215  | 0.00547  | 0.00616  | 0.00493 |
| 13273 | 1887.70 | 124.3 | 3.51 | 0.66  | 0.0544 | -0.0130 | 33.74 | 1.691 | 5.863  | 3.1366 | 0.00912  | 0.04748 | 0.00875  | 0.00291  | 0.01514 | 0.00279  | 0.00624  | 0.00572  | 0.00558 |
| 13274 | 1887.12 | 124.6 | 3.50 | 0.68  | 0.0537 | -0.0106 | 33.86 | 1.691 | 5.977  | 3.1354 | 0.01125  | 0.04938 | 0.00849  | 0.00359  | 0.01575 | 0.00271  | 0.00692  | 0.00633  | 0.00549 |
| 13275 | 1888.85 | 123.7 | 3.51 | 0.67  | 0.0516 | -0.0089 | 33.99 | 1.691 | 6.112  | 3.1375 | 0.01059  | 0.05245 | 0.01311  | 0.00337  | 0.01672 | 0.00418  | 0.00671  | 0.00730  | 0.00696 |
| 13276 | 1888.42 | 124.2 | 3.51 | 0.68  | 0.0499 | -0.0061 | 34.11 | 1.691 | 6.232  | 3.1377 | 0.00918  | 0.05172 | 0.01087  | 0.00293  | 0.01648 | 0.00346  | 0.00626  | 0.00706  | 0.00625 |
| 13277 | 1887.12 | 124.8 | 3.50 | 0.66  | 0.0503 | -0.0050 | 34.24 | 1.691 | 6.366  | 3.1345 | 0.01038  | 0.05541 | 0.01229  | 0.00331  | 0.01768 | 0.00392  | 0.00664  | 0.00826  | 0.00671 |
| 13278 | 1887.26 | 124.2 | 3.51 | 0.67  | 0.0516 | -0.0061 | 34.36 | 1.691 | 6.488  | 3.1352 | 0.01160  | 0.05625 | 0.01565  | 0.00370  | 0.01794 | 0.00499  | 0.00703  | 0.00852  | 0.00778 |
| 13279 | 1888.85 | 123.4 | 3.51 | 0.67  | 0.0468 | -0.0060 | 34.49 | 1.691 | 6.613  | 3.1385 | 0.01417  | 0.05131 | 0.01091  | 0.00452  | 0.01635 | 0.00348  | 0.00785  | 0.00693  | 0.00626 |
| 13280 | 1887.98 | 124.1 | 3.51 | 0.66  | 0.0485 | -0.0041 | 34.61 | 1.690 | 6.745  | 3.1371 | 0.01448  | 0.04971 | 0.01418  | 0.00461  | 0.01585 | 0.00452  | 0.00795  | 0.00643  | 0.00731 |
| 13281 | 1886.83 | 124.5 | 3.50 | 0.67  | 0.0493 | -0.0112 | 34.74 | 1.691 | 6.865  | 3.1357 | 0.01389  | 0.05198 | 0.01231  | 0.00443  | 0.01658 | 0.00392  | 0.00776  | 0.00716  | 0.00671 |
| 13282 | 1889.57 | 123.4 | 3.52 | 0.66  | 0.0502 | -0.0087 | 34.86 | 1.691 | 6.990  | 3.1399 | 0.01242  | 0.05393 | 0.01376  | 0.00396  | 0.01717 | 0.00438  | 0.00729  | 0.00776  | 0.00717 |
| 13283 | 1888.42 | 123.8 | 3.51 | 0.66  | 0.0485 | -0.0069 | 34.99 | 1.690 | 7.119  | 3.1386 | 0.01232  | 0.05163 | 0.01177  | 0.00393  | 0.01645 | 0.00375  | 0.00726  | 0.00703  | 0.00654 |
| 13284 | 1887.26 | 124.6 | 3.50 | 0.66  | 0.0475 | -0.0056 | 35.11 | 1.690 | 7.245  | 3.1345 | 0.01212  | 0.05322 | 0.02251  | 0.00387  | 0.01698 | 0.00718  | 0.00720  | 0.00756  | 0.00997 |
| 13285 | 1886.83 | 124.1 | 3.51 | 0.66  | 0.0465 | -0.0090 | 35.24 | 1.690 | 7.370  | 3.1358 | 0.01457  | 0.04864 | 0.01656  | 0.00465  | 0.01551 | 0.00528  | 0.00798  | 0.00609  | 0.00807 |
| 13286 | 1888.99 | 123.3 | 3.52 | 0.66  | 0.0482 | -0.0043 | 35.36 | 1.690 | 7.495  | 3.1382 | 0.01199  | 0.04830 | 0.01902  | 0.00382  | 0.01539 | 0.00606  | 0.00715  | 0.00597  | 0.00885 |
| 13287 | 1887.55 | 124.1 | 3.51 | 0.66  | 0.0465 | -0.0099 | 35.49 | 1.690 | 7.621  | 3.1366 | 0.01002  | 0.04355 | 0.01792  | 0.00319  | 0.01388 | 0.00571  | 0.00653  | 0.00447  | 0.00850 |
| 13288 | 1886.98 | 124.2 | 3.50 | 0.66  | 0.0493 | -0.0103 | 35.61 | 1.690 | 7.746  | 3.1359 | 0.00682  | 0.04326 | 0.01501  | 0.00218  | 0.01380 | 0.00479  | 0.00551  | 0.00438  | 0.00757 |
| 13289 | 1888.70 | 123.5 | 3.51 | 0.66  | 0.0465 | -0.0080 | 35.74 | 1.690 | 7.872  | 3.1370 | 0.00628  | 0.04228 | 0.01746  | 0.00200  | 0.01348 | 0.00556  | 0.00534  | 0.00406  | 0.00835 |
| 13290 | 1888.13 | 123.8 | 3.51 | 0.67  | 0.0461 | -0.0091 | 35.86 | 1.690 | 7.993  | 3.1370 | 0.00377  | 0.03902 | 0.01713  | 0.00120  | 0.01244 | 0.00546  | 0.00454  | 0.00302  | 0.00825 |
| 13291 | 1887.12 | 124.3 | 3.50 | 0.67  | 0.0493 | -0.0093 | 35.99 | 1.691 | 8.110  | 3.1352 | 0.00313  | 0.03819 | 0.01824  | 0.00100  | 0.01218 | 0.00582  | 0.00433  | 0.00276  | 0.00861 |
| 13292 | 1888.56 | 123.6 | 3.51 | 0.67  | 0.0472 | -0.0086 | 36.11 | 1.690 | 8.245  | 3.1382 | 0.00093  | 0.03225 | 0.01803  | 0.00030  | 0.01028 | 0.00575  | 0.00363  | 0.00086  | 0.00853 |
| 13293 | 1888.56 | 123.9 | 3.51 | 0.67  | 0.0472 | -0.0076 | 36.24 | 1.690 | 8.367  | 3.1376 | -0.00067 | 0.03124 | 0.02040  | -0.00021 | 0.00996 | 0.00650  | 0.00312  | 0.00054  | 0.00929 |
| 13294 | 1887.55 | 124.5 | 3.50 | 0.66  | 0.0503 | -0.0106 | 36.36 | 1.690 | 8.491  | 3.1361 | -0.00421 | 0.02586 | 0.01883  | -0.00134 | 0.00824 | 0.00600  | 0.00199  | -0.00117 | 0.00879 |
| 13295 | 1886.54 | 124.4 | 3.50 | 0.67  | 0.0472 | -0.0048 | 36.49 | 1.691 | 8.616  | 3.1348 | -0.00934 | 0.02350 | 0.01760  | -0.00298 | 0.00750 | 0.00561  | 0.00035  | -0.00192 | 0.00840 |
| 13296 | 1888.56 | 123.7 | 3.51 | 0.67  | 0.0502 | -0.0078 | 36.61 | 1.691 | 8.736  | 3.1372 | -0.01240 | 0.01588 | 0.01296  | -0.00395 | 0.00506 | 0.00413  | -0.00062 | -0.00436 | 0.00692 |
| 13297 | 1888.27 | 124.5 | 3.51 | 0.65  | 0.0458 | -0.0047 | 36.74 | 1.690 | 8.879  | 3.1372 | -0.01793 | 0.01191 | 0.01199  | -0.00572 | 0.00380 | 0.00382  | -0.00238 | -0.00562 | 0.00661 |
| 13298 | 1886.83 | 124.8 | 3.50 | 0.66  | 0.0479 | -0.0054 | 36.86 | 1.690 | 8.997  | 3.1343 | -0.02049 | 0.00681 | 0.00797  | -0.00654 | 0.00217 | 0.00254  | -0.00321 | -0.00725 | 0.00533 |
| 13299 | 1888.99 | 124.0 | 3.51 | 0.66  | 0.0502 | -0.0078 | 36.99 | 1.690 | 9.121  | 3.1389 | -0.02543 | 0.00623 | 0.00312  | -0.00810 | 0.00199 | 0.00100  | -0.00477 | -0.00743 | 0.00378 |
| 13300 | 1888.85 | 123.7 | 3.51 | 0.66  | 0.0495 | -0.0073 |       |       |        |        |          |         |          |          |         |          |          |          |         |

Table A21. Concluded.

Run = 198

M = 1.60

xsppos = 42.350

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc   | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|---------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 13320 | 1888.42 | 124.1 | 3.51 | 0.67  | 0.0537 | -0.0097 | 39.61 | 1.691 | 11.734 | 3.1376 | -0.01943 | 0.01134 | -0.02769 | -0.00619 | 0.00362 | -0.00882 | -0.00286 | -0.00580 | -0.00604 |
| 13321 | 1888.42 | 123.8 | 3.51 | 0.66  | 0.0516 | -0.0043 | 39.74 | 1.691 | 11.867 | 3.1373 | -0.02214 | 0.01479 | -0.02631 | -0.00706 | 0.00471 | -0.00839 | -0.00372 | -0.00470 | -0.00560 |
| 13322 | 1888.27 | 124.4 | 3.51 | 0.66  | 0.0516 | -0.0071 | 39.86 | 1.691 | 11.989 | 3.1373 | -0.02121 | 0.01738 | -0.02845 | -0.00676 | 0.00554 | -0.00907 | -0.00343 | -0.00388 | -0.00628 |
| 13323 | 1886.98 | 124.9 | 3.50 | 0.66  | 0.0503 | -0.0050 | 39.99 | 1.691 | 12.117 | 3.1346 | -0.02128 | 0.01995 | -0.02374 | -0.00679 | 0.00636 | -0.00757 | -0.00346 | -0.00305 | -0.00479 |
| 13324 | 1889.14 | 123.8 | 3.51 | 0.67  | 0.0519 | -0.0003 | 40.11 | 1.691 | 12.234 | 3.1398 | -0.02066 | 0.01862 | -0.02417 | -0.00658 | 0.00593 | -0.00770 | -0.00325 | -0.00349 | -0.00491 |
| 13325 | 1888.42 | 123.8 | 3.51 | 0.67  | 0.0520 | -0.0041 | 40.24 | 1.691 | 12.362 | 3.1366 | -0.01671 | 0.02090 | -0.01904 | -0.00533 | 0.00666 | -0.00607 | -0.00199 | -0.00276 | -0.00328 |
| 13326 | 1887.41 | 124.4 | 3.50 | 0.67  | 0.0499 | 0.0060  | 40.36 | 1.691 | 12.490 | 3.1367 | -0.01793 | 0.01951 | -0.02139 | -0.00572 | 0.00622 | -0.00682 | -0.00238 | -0.00320 | -0.00403 |
| 13327 | 1886.54 | 124.3 | 3.50 | 0.67  | 0.0492 | 0.0056  | 40.49 | 1.691 | 12.616 | 3.1347 | -0.01618 | 0.01893 | -0.01589 | -0.00516 | 0.00604 | -0.00507 | -0.00183 | -0.00338 | -0.00228 |
| 13328 | 1888.99 | 123.6 | 3.51 | 0.66  | 0.0502 | 0.0071  | 40.61 | 1.690 | 12.745 | 3.1376 | -0.01566 | 0.01817 | -0.01596 | -0.00499 | 0.00579 | -0.00509 | -0.00166 | -0.00363 | -0.00230 |
| 13329 | 1887.84 | 124.4 | 3.50 | 0.66  | 0.0516 | 0.0079  | 40.74 | 1.691 | 12.866 | 3.1370 | -0.01963 | 0.01508 | -0.01574 | -0.00626 | 0.00481 | -0.00502 | -0.00292 | -0.00461 | -0.00223 |
| 13330 | 1886.83 | 124.8 | 3.50 | 0.67  | 0.0475 | 0.0112  | 40.87 | 1.690 | 12.995 | 3.1349 | -0.01974 | 0.01514 | -0.01702 | -0.00630 | 0.00483 | -0.00543 | -0.00296 | -0.00459 | -0.00264 |
| 13331 | 1888.99 | 123.8 | 3.51 | 0.67  | 0.0523 | 0.0101  | 40.99 | 1.691 | 13.111 | 3.1384 | -0.01957 | 0.01451 | -0.01565 | -0.00624 | 0.00462 | -0.00499 | -0.00290 | -0.00480 | -0.00220 |
| 13332 | 1888.42 | 123.7 | 3.51 | 0.67  | 0.0554 | 0.0127  | 41.11 | 1.691 | 13.230 | 3.1373 | -0.02034 | 0.01436 | -0.01726 | -0.00648 | 0.00458 | -0.00550 | -0.00315 | -0.00484 | -0.00271 |
| 13333 | 1887.55 | 124.3 | 3.51 | 0.66  | 0.0495 | 0.0170  | 41.24 | 1.690 | 13.368 | 3.1360 | -0.02193 | 0.01771 | -0.01757 | -0.00699 | 0.00565 | -0.00560 | -0.00366 | -0.00377 | -0.00282 |
| 13334 | 1886.54 | 124.1 | 3.50 | 0.66  | 0.0509 | 0.0150  | 41.36 | 1.691 | 13.491 | 3.1337 | -0.01913 | 0.02125 | -0.01796 | -0.00610 | 0.00678 | -0.00573 | -0.00277 | -0.00264 | -0.00295 |
| 13335 | 1888.85 | 124.2 | 3.51 | 0.66  | 0.0481 | 0.0200  | 41.49 | 1.690 | 13.622 | 3.1388 | -0.01597 | 0.02391 | -0.02004 | -0.00509 | 0.00762 | -0.00638 | -0.00176 | -0.00180 | -0.00360 |
| 13336 | 1888.42 | 123.9 | 3.51 | 0.66  | 0.0461 | 0.0235  | 41.61 | 1.690 | 13.751 | 3.1363 | -0.01241 | 0.02539 | -0.01264 | -0.00396 | 0.00809 | -0.00403 | -0.00062 | -0.00132 | -0.00124 |
| 13337 | 1886.98 | 124.3 | 3.50 | 0.66  | 0.0444 | 0.0282  | 41.74 | 1.690 | 13.876 | 3.1355 | -0.01265 | 0.02301 | -0.02173 | -0.00403 | 0.00734 | -0.00693 | -0.00070 | -0.00208 | -0.00414 |
| 13338 | 1888.70 | 123.6 | 3.51 | 0.66  | 0.0495 | 0.0198  | 41.86 | 1.690 | 13.994 | 3.1371 | -0.01279 | 0.02058 | -0.01848 | -0.00408 | 0.00656 | -0.00589 | -0.00074 | -0.00286 | -0.00310 |
| 13339 | 1888.13 | 123.8 | 3.51 | 0.65  | 0.0447 | 0.0265  | 41.99 | 1.690 | 14.128 | 3.1366 | -0.01289 | 0.01997 | -0.02060 | -0.00411 | 0.00637 | -0.00657 | -0.00078 | -0.00305 | -0.00378 |
| 13340 | 1887.26 | 124.3 | 3.50 | 0.66  | 0.0506 | 0.0204  | 42.11 | 1.690 | 14.245 | 3.1346 | -0.01675 | 0.01920 | -0.02231 | -0.00534 | 0.00613 | -0.00712 | -0.00201 | -0.00329 | -0.00433 |
| 13341 | 1888.85 | 123.9 | 3.51 | 0.66  | 0.0509 | 0.0196  | 42.24 | 1.690 | 14.368 | 3.1391 | -0.01867 | 0.01823 | -0.02415 | -0.00595 | 0.00581 | -0.00769 | -0.00262 | -0.00361 | -0.00491 |
| 13342 | 1888.42 | 123.9 | 3.51 | 0.66  | 0.0471 | 0.0185  | 42.36 | 1.690 | 14.494 | 3.1377 | -0.01932 | 0.02507 | -0.01778 | -0.00616 | 0.00799 | -0.00567 | -0.00282 | -0.00143 | -0.00288 |
| 13343 | 1887.41 | 124.6 | 3.50 | 0.66  | 0.0489 | 0.0185  | 42.49 | 1.690 | 14.623 | 3.1352 | -0.01567 | 0.02972 | -0.01453 | -0.00500 | 0.00948 | -0.00463 | -0.00166 | 0.00006  | -0.00185 |
| 13344 | 1887.26 | 124.6 | 3.50 | 0.67  | 0.0509 | 0.0159  | 42.61 | 1.691 | 14.739 | 3.1356 | -0.01210 | 0.03242 | -0.01313 | -0.00386 | 0.01034 | -0.00419 | -0.00053 | -0.00092 | -0.00140 |
| 13345 | 1888.99 | 123.6 | 3.51 | 0.67  | 0.0498 | 0.0237  | 42.74 | 1.691 | 14.864 | 3.1389 | -0.01084 | 0.03158 | -0.01019 | -0.00345 | 0.01006 | -0.00325 | -0.00012 | 0.00064  | -0.00046 |
| 13346 | 1888.13 | 123.9 | 3.51 | 0.66  | 0.0481 | 0.0274  | 42.86 | 1.690 | 14.996 | 3.1369 | -0.00856 | 0.03106 | -0.01079 | -0.00273 | 0.00990 | -0.00344 | 0.00061  | 0.00048  | -0.00065 |
| 13347 | 1887.41 | 124.3 | 3.50 | 0.66  | 0.0458 | 0.0308  | 42.99 | 1.690 | 15.122 | 3.1370 | -0.00901 | 0.02906 | -0.01193 | -0.00287 | 0.00926 | -0.00380 | 0.00046  | -0.00016 | -0.00102 |
| 13348 | 1888.99 | 123.9 | 3.51 | 0.66  | 0.0495 | 0.0282  | 43.11 | 1.690 | 15.243 | 3.1386 | -0.00799 | 0.02944 | -0.01603 | -0.00255 | 0.00938 | -0.00511 | 0.00079  | -0.00004 | -0.00232 |
| 13349 | 1888.13 | 123.6 | 3.51 | 0.66  | 0.0471 | 0.0315  | 43.24 | 1.690 | 15.370 | 3.1371 | -0.00986 | 0.02855 | -0.01879 | -0.00314 | 0.00910 | -0.00599 | 0.00019  | -0.00032 | -0.00320 |
| 13350 | 1887.98 | 124.2 | 3.51 | 0.66  | 0.0492 | 0.0261  | 43.36 | 1.690 | 15.491 | 3.1368 | -0.01073 | 0.02824 | -0.01730 | -0.00342 | 0.00900 | -0.00551 | -0.00009 | -0.00042 | -0.00273 |
| 13351 | 1887.41 | 124.3 | 3.50 | 0.67  | 0.0464 | 0.0330  | 43.49 | 1.690 | 15.618 | 3.1358 | -0.01037 | 0.02750 | -0.01716 | -0.00331 | 0.00877 | -0.00547 | 0.00003  | -0.00065 | -0.00269 |
| 13352 | 1888.85 | 123.7 | 3.51 | 0.66  | 0.0454 | 0.0306  | 43.61 | 1.690 | 15.749 | 3.1384 | -0.01200 | 0.02747 | -0.01058 | -0.00382 | 0.00875 | -0.00337 | -0.00049 | -0.00066 | -0.00058 |
| 13353 | 1888.27 | 124.2 | 3.51 | 0.66  | 0.0457 | 0.0364  | 43.74 | 1.690 | 15.873 | 3.1377 | -0.01105 | 0.02830 | -0.00724 | -0.00352 | 0.00902 | -0.00231 | -0.00019 | -0.00040 | 0.00048  |
| 13354 | 1887.41 | 124.7 | 3.50 | 0.66  | 0.0444 | 0.0384  | 43.86 | 1.690 | 15.997 | 3.1346 | -0.01124 | 0.02994 | -0.00295 | -0.00358 | 0.00955 | -0.00094 | -0.00025 | 0.00013  | 0.00184  |
| 13355 | 1886.98 | 124.5 | 3.50 | 0.66  | 0.0447 | 0.0321  | 43.99 | 1.690 | 16.126 | 3.1361 | -0.01489 | 0.02881 | -0.00515 | -0.00475 | 0.00919 | -0.00164 | -0.00141 | -0.00023 | 0.00114  |
| 13356 | 1888.70 | 124.0 | 3.51 | 0.66  | 0.0457 | 0.0354  | 44.11 | 1.690 | 16.246 | 3.1383 | -0.01161 | 0.02773 | -0.00542 | -0.00370 | 0.00884 | -0.00173 | -0.00037 | -0.00058 | 0.00106  |
| 13357 | 1888.13 | 124.7 | 3.50 | 0.66  | 0.0423 | 0.0401  | 44.24 | 1.690 | 16.375 | 3.1371 | -0.01259 | 0.02803 | -0.00706 | -0.00401 | 0.00893 | -0.00225 | -0.00068 | -0.00048 | 0.00053  |
| 13358 | 1886.83 | 124.9 | 3.50 | 0.67  | 0.0444 | 0.0328  | 44.36 | 1.691 | 16.491 | 3.1350 | -0.01386 | 0.02849 | -0.00443 | -0.00442 | 0.00909 | -0.00141 | -0.00109 | -0.00033 | 0.00137  |
| 13359 | 1888.99 | 123.9 | 3.51 | 0.66  | 0.0406 | 0.0391  | 44.49 | 1.690 | 16.629 | 3.1389 | -0.01048 | 0.02838 | -0.00440 | -0.00334 | 0.00904 | -0.00140 | -0.00001 | -0.00038 | 0.00139  |
| 13360 | 1888.42 | 123.9 | 3.51 | 0.68  | 0.0444 | 0.0356  | 44.61 | 1.691 | 16.733 | 3.1384 | -0.01261 | 0.02750 | -0.00903 | -0.00402 | 0.00876 | -0.00288 | -0.00069 | -0.00066 | -0.00009 |
| 13361 | 1887.55 | 124.5 | 3.50 | 0.67  | 0.0461 | 0.0282  | 44.74 | 1.691 | 16.864 | 3.1365 | -0.01262 | 0.02851 | -0.00573 | -0.00402 | 0.00909 | -0.00183 | -0.00069 | -0.00033 | 0.00096  |
| 13362 | 1886.40 | 124.4 | 3.50 | 0.67  | 0.0444 | 0.0300  | 44.86 | 1.691 | 16.990 | 3.1341 | -0.01226 | 0.02877 | -0.00771 | -0.00391 | 0.00918 | -0.00246 | -0.00058 | -0.00024 | 0.00033  |
| 13363 | 1888.85 | 123.5 | 3.51 | 0.66  | 0.0440 | 0.0326  | 44.99 | 1.690 | 17.122 | 3.1386 | -0.01253 | 0.02974 | -0.00716 | -0.00399 | 0.00948 | -0.00228 | -0.00066 | 0.00006  | 0.00050  |
| 13364 | 1888.13 | 124.1 | 3.51 | 0.67  | 0.0444 | 0.0310  | 45.11 | 1.690 | 17.244 | 3.1376 | -0.01097 | 0.02739 | -0.00880 | -0.00350 | 0.00873 | -0.00280 | -0.00016 | -0.00069 | -0.00002 |
| 13365 | 1887.12 | 124.6 | 3.50 | 0.66  | 0.0451 | 0.0313  | 45.24 | 1.690 | 17.376 | 3.1352 | -0.01210 | 0.02820 | -0.00882 | -0.00386 | 0.00900 | -0.00281 | -0.00053 | -0.00042 | -0.00003 |
| 13366 | 1888.70 | 124.0 | 3.51 | 0.66  | 0.0413 | 0.0367  | 45.36 | 1.690 | 17.506 | 3.1386 | -0.01218 | 0.02811 | -0.00474 | -0.00388 | 0.00896 | -0.00151 | -0.00055 | -0.00046 | 0.00127  |
| 13367 | 1888.85 | 123.8 | 3.51 | 0.67  | 0.0454 | 0.0306  | 45.49 | 1.690 | 17.617 | 3.1373 | -0.00966 | 0.02983 | -0.00462 | -0.00308 | 0.00951 | -0.00147 | 0.00026  | 0.00009  | 0.00131  |
| 13368 | 1887.55 | 124.5 | 3.50 | 0.66  | 0.0475 | 0.0261  | 45.61 | 1.690 | 17.745 | 3.1356 | -0.01163 | 0.03061 | -0.00788 | -0.00371 | 0.00976 | -0.00251 | -0.00037 | 0.00034  | 0.00027  |
| 13369 | 1886.26 | 124.4 | 3.50 | 0.65  | 0.0424 | 0.0326  | 45.74 | 1.690 | 17.880 | 3.1336 | -0.01170 | 0.02897 | -0.00432 | -0.00374 | 0.00925 | -0.00138 | -0.00040 | -0.00017 | 0.00141  |
| 13370 | 1888.70 | 123.5 | 3.51 | 0.67  | 0.0457 | 0.0252  | 45.86 | 1.691 | 17.987 | 3.1386 | -0.01187 | 0.02801 | -0.00486 | -0.00378 | 0.00892 | -0.00155 | -0.00045 | -0.00049 | 0.00124  |
| 13371 | 1888.13 | 124.1 | 3.51 | 0.65  | 0.0420 | 0.0343  | 45.99 | 1.690 | 18.134 | 3.1355 | -0.01169 | 0.03158 | -0.00506 | -0.00373 | 0.01007 | -0.00161 | -0.00040 | 0.00065  | 0.00117  |
| 13372 | 1887.26 | 124.6 | 3.50 | 0.66  | 0.0468 | 0.0314  | 46.11 | 1.690 | 18.244 | 3.1357 | -0.01127 | 0.02938 | -0.00610 | -0.00360 | 0.00937 | -0.00195 | -0.00026 | -0.00005 | 0.00084  |
| 13373 | 1888.99 |       |      |       |        |         |       |       |        |        |          |         |          |          |         |          |          |          |          |

Table A22. Run 201.

Run = 201  
M = 1.60  
xsppos = 42.352

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 13387 | 1887.98 | 124.7 | 3.50 | 0.27  | 0.0253 | 0.0447 | 21.37 | 1.691 | -6.506 | 3.1315 | -0.00964 | 0.03092 | -0.01674 | -0.00308 | 0.00987 | -0.00535 | -0.00012 | -0.00043 | -0.00005 |
| 13388 | 1888.13 | 124.6 | 3.50 | 0.28  | 0.0263 | 0.0425 | 21.49 | 1.691 | -6.386 | 3.1307 | -0.00913 | 0.03228 | -0.01744 | -0.00292 | 0.01031 | -0.00557 | 0.00004  | 0.00001  | -0.00027 |
| 13389 | 1887.98 | 124.6 | 3.50 | 0.28  | 0.0277 | 0.0442 | 21.62 | 1.691 | -6.265 | 3.1306 | -0.00823 | 0.03256 | -0.01678 | -0.00263 | 0.01040 | -0.00536 | 0.00033  | 0.00010  | -0.00006 |
| 13390 | 1887.55 | 124.6 | 3.50 | 0.27  | 0.0264 | 0.0416 | 21.74 | 1.690 | -6.130 | 3.1296 | -0.00964 | 0.03311 | -0.01553 | -0.00308 | 0.01058 | -0.00496 | -0.00012 | 0.00028  | 0.00034  |
| 13391 | 1887.98 | 124.6 | 3.50 | 0.28  | 0.0250 | 0.0436 | 21.87 | 1.691 | -6.007 | 3.1308 | -0.00970 | 0.03238 | -0.01648 | -0.00310 | 0.01034 | -0.00526 | -0.00014 | 0.00004  | 0.00004  |
| 13392 | 1887.70 | 124.7 | 3.50 | 0.28  | 0.0281 | 0.0388 | 21.86 | 1.691 | -6.014 | 3.1306 | -0.00985 | 0.03277 | -0.01707 | -0.00315 | 0.01047 | -0.00545 | -0.00019 | 0.00016  | -0.00015 |
| 13393 | 1887.98 | 124.4 | 3.50 | 0.29  | 0.0253 | 0.0382 | 21.99 | 1.691 | -5.893 | 3.1314 | -0.01056 | 0.03247 | -0.01881 | -0.00337 | 0.01037 | -0.00601 | -0.00041 | 0.00007  | -0.00070 |
| 13394 | 1888.13 | 124.3 | 3.51 | 0.28  | 0.0253 | 0.0438 | 22.11 | 1.691 | -5.763 | 3.1313 | -0.01188 | 0.03321 | -0.01586 | -0.00379 | 0.01061 | -0.00507 | -0.00083 | 0.00030  | 0.00024  |
| 13395 | 1887.84 | 124.5 | 3.50 | 0.27  | 0.0260 | 0.0460 | 22.24 | 1.690 | -5.627 | 3.1304 | -0.00980 | 0.03269 | -0.01726 | -0.00313 | 0.01044 | -0.00551 | -0.00017 | 0.00014  | -0.00021 |
| 13396 | 1888.56 | 124.4 | 3.51 | 0.28  | 0.0267 | 0.0408 | 22.36 | 1.691 | -5.516 | 3.1318 | -0.00900 | 0.03286 | -0.01776 | -0.00287 | 0.01049 | -0.00567 | 0.00009  | 0.00019  | -0.00037 |
| 13397 | 1887.98 | 124.5 | 3.50 | 0.27  | 0.0260 | 0.0451 | 22.49 | 1.691 | -5.383 | 3.1310 | -0.00950 | 0.03353 | -0.01637 | -0.00304 | 0.01071 | -0.00523 | -0.00008 | 0.00041  | 0.00007  |
| 13398 | 1887.84 | 124.7 | 3.50 | 0.27  | 0.0243 | 0.0544 | 22.61 | 1.690 | -5.255 | 3.1315 | -0.01036 | 0.03154 | -0.01797 | -0.00331 | 0.01007 | -0.00574 | -0.00035 | -0.00023 | -0.00044 |
| 13399 | 1887.98 | 124.6 | 3.50 | 0.27  | 0.0215 | 0.0519 | 22.74 | 1.690 | -5.125 | 3.1314 | -0.01147 | 0.03247 | -0.01599 | -0.00366 | 0.01037 | -0.00511 | -0.00070 | 0.00007  | 0.00020  |
| 13400 | 1888.27 | 124.6 | 3.50 | 0.27  | 0.0232 | 0.0603 | 22.87 | 1.690 | -4.998 | 3.1316 | -0.01054 | 0.03383 | -0.01717 | -0.00337 | 0.01080 | -0.00548 | -0.00041 | 0.00050  | -0.00018 |
| 13401 | 1888.42 | 124.6 | 3.50 | 0.27  | 0.0229 | 0.0592 | 22.99 | 1.690 | -4.878 | 3.1320 | -0.01092 | 0.03300 | -0.01648 | -0.00349 | 0.01054 | -0.00526 | -0.00053 | 0.00024  | 0.00004  |
| 13402 | 1887.41 | 124.6 | 3.50 | 0.27  | 0.0239 | 0.0663 | 23.11 | 1.690 | -4.755 | 3.1294 | -0.01040 | 0.03339 | -0.01636 | -0.00332 | 0.01067 | -0.00523 | -0.00036 | 0.00037  | 0.00007  |
| 13403 | 1888.27 | 124.4 | 3.51 | 0.28  | 0.0222 | 0.0691 | 23.24 | 1.690 | -4.629 | 3.1323 | -0.01024 | 0.03107 | -0.01582 | -0.00327 | 0.00992 | -0.00505 | -0.00031 | -0.00038 | 0.00025  |
| 13404 | 1888.13 | 124.4 | 3.51 | 0.27  | 0.0219 | 0.0652 | 23.36 | 1.690 | -4.496 | 3.1311 | -0.01182 | 0.03221 | -0.01750 | -0.00377 | 0.01029 | -0.00559 | -0.00081 | -0.00002 | -0.00029 |
| 13405 | 1888.27 | 124.4 | 3.51 | 0.26  | 0.0191 | 0.0599 | 23.49 | 1.689 | -4.365 | 3.1309 | -0.00947 | 0.03338 | -0.01513 | -0.00303 | 0.01066 | -0.00483 | -0.00007 | 0.00036  | 0.00047  |
| 13406 | 1888.56 | 124.2 | 3.51 | 0.27  | 0.0222 | 0.0588 | 23.61 | 1.690 | -4.251 | 3.1313 | -0.00909 | 0.03395 | -0.01494 | -0.00290 | 0.01084 | -0.00477 | 0.00006  | 0.00054  | 0.00053  |
| 13407 | 1888.42 | 124.4 | 3.51 | 0.28  | 0.0274 | 0.0458 | 23.74 | 1.691 | -4.137 | 3.1325 | -0.01023 | 0.03184 | -0.01886 | -0.00327 | 0.01017 | -0.00602 | -0.00031 | -0.00014 | -0.00072 |
| 13408 | 1887.84 | 124.6 | 3.50 | 0.29  | 0.0267 | 0.0483 | 23.86 | 1.691 | -4.017 | 3.1310 | -0.01065 | 0.03371 | -0.01723 | -0.00340 | 0.01077 | -0.00550 | -0.00044 | 0.00046  | -0.00020 |
| 13409 | 1887.41 | 124.7 | 3.50 | 0.29  | 0.0267 | 0.0436 | 23.99 | 1.691 | -3.896 | 3.1298 | -0.01079 | 0.03338 | -0.01541 | -0.00345 | 0.01067 | -0.00492 | -0.00049 | 0.00036  | 0.00038  |
| 13410 | 1888.56 | 124.4 | 3.51 | 0.29  | 0.0236 | 0.0419 | 24.11 | 1.691 | -3.765 | 3.1323 | -0.01123 | 0.03265 | -0.01494 | -0.00359 | 0.01042 | -0.00477 | -0.00063 | 0.00012  | 0.00053  |
| 13411 | 1887.98 | 124.5 | 3.50 | 0.29  | 0.0288 | 0.0401 | 24.24 | 1.691 | -3.648 | 3.1324 | -0.01099 | 0.03135 | -0.01772 | -0.00351 | 0.01001 | -0.00566 | -0.00055 | -0.00029 | -0.00036 |
| 13412 | 1887.98 | 124.8 | 3.50 | 0.29  | 0.0284 | 0.0417 | 24.36 | 1.691 | -3.521 | 3.1317 | -0.00983 | 0.03127 | -0.01875 | -0.00314 | 0.00998 | -0.00599 | -0.00018 | -0.00032 | -0.00069 |
| 13413 | 1888.13 | 124.5 | 3.50 | 0.28  | 0.0263 | 0.0443 | 24.49 | 1.691 | -3.390 | 3.1322 | -0.01115 | 0.03215 | -0.01783 | -0.00356 | 0.01026 | -0.00569 | -0.00060 | -0.00004 | -0.00039 |
| 13414 | 1888.13 | 124.3 | 3.51 | 0.27  | 0.0226 | 0.0516 | 24.61 | 1.690 | -3.253 | 3.1324 | -0.01099 | 0.03268 | -0.01538 | -0.00351 | 0.01043 | -0.00491 | -0.00055 | 0.00013  | 0.00039  |
| 13415 | 1888.13 | 124.5 | 3.50 | 0.27  | 0.0236 | 0.0521 | 24.74 | 1.690 | -3.130 | 3.1309 | -0.00947 | 0.03651 | -0.01472 | -0.00302 | 0.01166 | -0.00470 | -0.00006 | 0.00136  | 0.00060  |
| 13416 | 1887.55 | 124.4 | 3.50 | 0.28  | 0.0233 | 0.0501 | 24.86 | 1.690 | -3.007 | 3.1311 | -0.00901 | 0.03509 | -0.01710 | -0.00288 | 0.01121 | -0.00546 | 0.00008  | 0.00090  | -0.00016 |
| 13417 | 1888.85 | 124.4 | 3.51 | 0.27  | 0.0236 | 0.0456 | 24.99 | 1.690 | -2.876 | 3.1329 | -0.00775 | 0.03360 | -0.01919 | -0.00247 | 0.01072 | -0.00613 | 0.00049  | 0.00042  | -0.00083 |
| 13418 | 1887.98 | 124.6 | 3.50 | 0.27  | 0.0198 | 0.0482 | 25.11 | 1.690 | -2.752 | 3.1311 | -0.00746 | 0.03187 | -0.01631 | -0.00238 | 0.01018 | -0.00521 | 0.00058  | -0.00012 | 0.00009  |
| 13419 | 1887.84 | 124.7 | 3.50 | 0.28  | 0.0270 | 0.0484 | 25.24 | 1.691 | -2.639 | 3.1310 | -0.00829 | 0.03122 | -0.01719 | -0.00265 | 0.00997 | -0.00549 | 0.00031  | -0.00033 | -0.00019 |
| 13420 | 1887.84 | 124.6 | 3.50 | 0.28  | 0.0222 | 0.0570 | 25.36 | 1.691 | -2.508 | 3.1311 | -0.00918 | 0.02956 | -0.01591 | -0.00293 | 0.00944 | -0.00508 | 0.00003  | -0.00086 | 0.00022  |
| 13421 | 1888.27 | 124.3 | 3.51 | 0.28  | 0.0215 | 0.0538 | 25.49 | 1.691 | -2.384 | 3.1312 | -0.01070 | 0.03230 | -0.01840 | -0.00342 | 0.01032 | -0.00588 | -0.00046 | 0.00001  | -0.00058 |
| 13422 | 1888.56 | 124.6 | 3.50 | 0.27  | 0.0188 | 0.0607 | 25.61 | 1.690 | -2.251 | 3.1319 | -0.01199 | 0.03261 | -0.01434 | -0.00383 | 0.01041 | -0.00458 | -0.00087 | 0.00011  | 0.00072  |
| 13423 | 1887.55 | 124.8 | 3.50 | 0.28  | 0.0202 | 0.0633 | 25.74 | 1.690 | -2.130 | 3.1311 | -0.00962 | 0.03678 | -0.01774 | -0.00307 | 0.01175 | -0.00567 | -0.00011 | 0.00144  | -0.00037 |
| 13424 | 1888.70 | 124.3 | 3.51 | 0.28  | 0.0212 | 0.0592 | 25.86 | 1.691 | -2.010 | 3.1321 | -0.00764 | 0.04081 | -0.01642 | -0.00244 | 0.01303 | -0.00524 | 0.00052  | 0.00273  | 0.00006  |
| 13425 | 1888.27 | 124.6 | 3.50 | 0.27  | 0.0181 | 0.0594 | 25.99 | 1.690 | -1.876 | 3.1313 | -0.00411 | 0.03863 | -0.01516 | -0.00131 | 0.01234 | -0.00484 | 0.00165  | 0.00204  | 0.00046  |
| 13426 | 1887.70 | 124.8 | 3.50 | 0.28  | 0.0188 | 0.0626 | 26.11 | 1.690 | -1.754 | 3.1298 | -0.00159 | 0.03775 | -0.01380 | -0.00051 | 0.01206 | -0.00441 | 0.00245  | 0.00176  | 0.00089  |
| 13427 | 1887.12 | 124.7 | 3.50 | 0.28  | 0.0157 | 0.0646 | 26.24 | 1.690 | -1.625 | 3.1297 | -0.00379 | 0.03452 | -0.01602 | -0.00121 | 0.01103 | -0.00512 | 0.00175  | 0.00073  | 0.00018  |
| 13428 | 1888.56 | 124.3 | 3.51 | 0.29  | 0.0219 | 0.0540 | 26.36 | 1.691 | -1.516 | 3.1323 | -0.00823 | 0.02982 | -0.01744 | -0.00263 | 0.00952 | -0.00557 | 0.00033  | -0.00078 | -0.00027 |
| 13429 | 1888.27 | 124.3 | 3.51 | 0.29  | 0.0184 | 0.0549 | 26.49 | 1.691 | -1.387 | 3.1312 | -0.00914 | 0.02928 | -0.01431 | -0.00292 | 0.00935 | -0.00457 | 0.00004  | -0.00095 | 0.00073  |
| 13430 | 1887.41 | 124.5 | 3.50 | 0.28  | 0.0191 | 0.0562 | 26.61 | 1.690 | -1.257 | 3.1300 | -0.01249 | 0.02924 | -0.01717 | -0.00399 | 0.00934 | -0.00549 | -0.00103 | -0.00096 | -0.00018 |
| 13431 | 1888.42 | 124.2 | 3.51 | 0.28  | 0.0181 | 0.0566 | 26.74 | 1.690 | -1.132 | 3.1320 | -0.01461 | 0.03258 | -0.01662 | -0.00466 | 0.01040 | -0.00531 | -0.00170 | 0.00010  | -0.00001 |
| 13432 | 1888.13 | 124.5 | 3.50 | 0.28  | 0.0198 | 0.0547 | 26.86 | 1.691 | -1.010 | 3.1309 | -0.01182 | 0.03753 | -0.01386 | -0.00378 | 0.01199 | -0.00443 | -0.00082 | 0.00168  | 0.00087  |
| 13433 | 1887.70 | 124.7 | 3.50 | 0.28  | 0.0195 | 0.0564 | 26.99 | 1.690 | -0.880 | 3.1308 | -0.00661 | 0.04306 | -0.01284 | -0.00211 | 0.01375 | -0.00410 | 0.00085  | 0.00345  | 0.00120  |
| 13434 | 1888.42 | 124.5 | 3.51 | 0.28  | 0.0198 | 0.0603 | 27.12 | 1.691 | -0.757 | 3.1328 | -0.00305 | 0.04250 | -0.01151 | -0.00097 | 0.01357 | -0.00367 | 0.00199  | 0.00326  | 0.00163  |
| 13435 | 1888.42 | 124.2 | 3.51 | 0.28  | 0.0181 | 0.0575 | 27.24 | 1.690 | -0.629 | 3.1323 | -0.00039 | 0.03946 | -0.01069 | -0.00012 | 0.01260 | -0.00341 | 0.00284  | 0.00230  | 0.00189  |
| 13436 | 1888.27 | 124.6 | 3.50 | 0.29  | 0.0215 | 0.0603 | 27.36 | 1.691 | -0.516 | 3.1323 | -0.00220 | 0.03764 | -0.01047 | -0.00070 | 0.01202 | -0.00334 | 0.00226  | 0.00171  | 0.00196  |
| 13437 | 1886.69 | 125.0 | 3.50 | 0.29  | 0.0191 | 0.0581 | 27.49 | 1.691 | -0.388 | 3.1300 | -0.00363 | 0.03329 | -0.01558 | -0.00116 | 0.01063 | -0.00498 | 0.00180  | 0.00033  | 0.00032  |
| 13438 | 1888.70 | 124.3 | 3.51 | 0.28  | 0.0184 | 0.0577 | 27.61 | 1.690 | -0.256 | 3.1333 | -0.00793 | 0.03119 | -0.01893 | -0.00253 | 0.00995 | -0.00604 | 0.00043  | -0.00035 | -0.00074 |
| 13439 | 1888.42 | 124.5 | 3.51 | 0.29  | 0.0212 | 0.0517 | 27.74 | 1.691 | -0.137 | 3.1321 | -0.01017 | 0.02971 | -0.02159 | -0.00325 | 0.00949 | -0.00689 | -0.00029 | -0.00082 | -0.00159 |
| 13440 | 1887.84 | 125.0 | 3.50 | 0.28  | 0.0202 | 0.0493 | 27.86 | 1.690 | -0.002 | 3.1314 | -0.01107 | 0.03384 | -0.01920 |          |         |          |          |          |          |

Table A22. Continued.

Run = 201

M = 1.60

xsppos = 42.351

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c  | dpp02c  | dpp03c  |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|---------|---------|---------|
| 13460 | 1887.41 | 124.7 | 3.50 | 0.29  | 0.0250 | 0.0492 | 30.24 | 1.691 | 2.358  | 3.1303 | -0.00264 | 0.04227 | -0.01080 | -0.00084 | 0.01350 | -0.00345 | 0.00212 | 0.00320 | 0.00185 |
| 13461 | 1888.70 | 124.2 | 3.51 | 0.29  | 0.0219 | 0.0577 | 30.36 | 1.691 | 2.486  | 3.1319 | -0.00031 | 0.04352 | -0.00672 | -0.00010 | 0.01390 | -0.00214 | 0.00286 | 0.00359 | 0.00316 |
| 13462 | 1888.85 | 123.9 | 3.51 | 0.28  | 0.0243 | 0.0525 | 30.49 | 1.691 | 2.616  | 3.1328 | -0.00153 | 0.04287 | -0.00538 | -0.00049 | 0.01368 | -0.00172 | 0.00247 | 0.00338 | 0.00358 |
| 13463 | 1888.42 | 124.2 | 3.51 | 0.29  | 0.0212 | 0.0545 | 30.71 | 1.691 | 2.831  | 3.1309 | -0.00039 | 0.04419 | -0.00211 | -0.00012 | 0.01411 | -0.00067 | 0.00284 | 0.00381 | 0.00463 |
| 13464 | 1887.70 | 124.6 | 3.50 | 0.29  | 0.0229 | 0.0564 | 30.74 | 1.691 | 2.863  | 3.1304 | -0.00133 | 0.04180 | -0.00591 | -0.00042 | 0.01335 | -0.00189 | 0.00254 | 0.00305 | 0.00341 |
| 13465 | 1888.85 | 124.2 | 3.51 | 0.30  | 0.0243 | 0.0581 | 30.86 | 1.691 | 2.976  | 3.1327 | -0.00067 | 0.04139 | -0.00848 | -0.00021 | 0.01321 | -0.00271 | 0.00275 | 0.00291 | 0.00259 |
| 13466 | 1888.13 | 124.1 | 3.51 | 0.29  | 0.0226 | 0.0590 | 30.99 | 1.691 | 3.109  | 3.1310 | 0.00007  | 0.04347 | -0.00735 | 0.00002  | 0.01388 | -0.00235 | 0.00298 | 0.00358 | 0.00295 |
| 13467 | 1888.27 | 124.6 | 3.50 | 0.29  | 0.0260 | 0.0525 | 31.12 | 1.691 | 3.234  | 3.1332 | -0.00348 | 0.04190 | -0.00962 | -0.00111 | 0.01337 | -0.00307 | 0.00185 | 0.00307 | 0.00223 |
| 13468 | 1886.98 | 124.8 | 3.50 | 0.30  | 0.0233 | 0.0538 | 31.24 | 1.691 | 3.356  | 3.1296 | -0.00018 | 0.04425 | -0.00899 | -0.00006 | 0.01414 | -0.00287 | 0.00290 | 0.00384 | 0.00243 |
| 13469 | 1888.99 | 124.1 | 3.51 | 0.30  | 0.0277 | 0.0488 | 31.36 | 1.692 | 3.468  | 3.1333 | -0.00047 | 0.04486 | -0.00957 | -0.00015 | 0.01432 | -0.00305 | 0.00281 | 0.00402 | 0.00225 |
| 13470 | 1888.70 | 124.1 | 3.51 | 0.29  | 0.0298 | 0.0490 | 31.49 | 1.692 | 3.601  | 3.1324 | -0.00096 | 0.04610 | -0.00883 | -0.00031 | 0.01472 | -0.00282 | 0.00265 | 0.00442 | 0.00248 |
| 13471 | 1887.55 | 124.6 | 3.50 | 0.29  | 0.0246 | 0.0518 | 31.61 | 1.691 | 3.729  | 3.1313 | 0.00045  | 0.04334 | -0.00817 | 0.00014  | 0.01384 | -0.00261 | 0.00310 | 0.00354 | 0.00269 |
| 13472 | 1886.54 | 124.5 | 3.50 | 0.29  | 0.0226 | 0.0591 | 31.74 | 1.691 | 3.860  | 3.1291 | 0.00101  | 0.04515 | -0.00529 | 0.00032  | 0.01443 | -0.00169 | 0.00328 | 0.00413 | 0.00361 |
| 13473 | 1888.70 | 123.8 | 3.51 | 0.29  | 0.0260 | 0.0618 | 31.86 | 1.691 | 3.980  | 3.1329 | 0.00111  | 0.04366 | -0.00874 | 0.00035  | 0.01394 | -0.00279 | 0.00331 | 0.00364 | 0.00251 |
| 13474 | 1888.27 | 124.4 | 3.51 | 0.30  | 0.0263 | 0.0564 | 31.99 | 1.692 | 4.099  | 3.1318 | -0.00023 | 0.04307 | -0.00802 | -0.00007 | 0.01375 | -0.00256 | 0.00289 | 0.00345 | 0.00274 |
| 13475 | 1887.70 | 124.2 | 3.51 | 0.29  | 0.0256 | 0.0645 | 31.99 | 1.691 | 4.102  | 3.1325 | -0.00048 | 0.04264 | -0.00830 | -0.00015 | 0.01361 | -0.00265 | 0.00281 | 0.00331 | 0.00265 |
| 13476 | 1888.85 | 124.0 | 3.51 | 0.29  | 0.0246 | 0.0573 | 32.12 | 1.691 | 4.235  | 3.1327 | -0.00243 | 0.04157 | -0.00761 | -0.00078 | 0.01327 | -0.00243 | 0.00218 | 0.00297 | 0.00287 |
| 13477 | 1887.98 | 124.5 | 3.50 | 0.30  | 0.0287 | 0.0522 | 32.24 | 1.692 | 4.347  | 3.1326 | -0.00282 | 0.04153 | -0.01034 | -0.00090 | 0.01326 | -0.00330 | 0.00206 | 0.00296 | 0.00200 |
| 13478 | 1886.98 | 124.8 | 3.50 | 0.29  | 0.0288 | 0.0420 | 32.36 | 1.692 | 4.476  | 3.1303 | -0.00261 | 0.04568 | -0.00678 | -0.00083 | 0.01459 | -0.00217 | 0.00213 | 0.00429 | 0.00314 |
| 13479 | 1888.99 | 124.0 | 3.51 | 0.30  | 0.0263 | 0.0462 | 32.36 | 1.692 | 4.475  | 3.1328 | -0.00183 | 0.04594 | -0.00758 | -0.00058 | 0.01466 | -0.00242 | 0.00238 | 0.00436 | 0.00288 |
| 13480 | 1888.13 | 124.1 | 3.51 | 0.29  | 0.0253 | 0.0438 | 32.49 | 1.691 | 4.606  | 3.1317 | -0.00120 | 0.04652 | -0.00545 | -0.00038 | 0.01485 | -0.00174 | 0.00258 | 0.00455 | 0.00356 |
| 13481 | 1887.55 | 124.6 | 3.50 | 0.29  | 0.0260 | 0.0470 | 32.61 | 1.691 | 4.732  | 3.1307 | 0.00115  | 0.04912 | -0.00780 | 0.00037  | 0.01569 | -0.00249 | 0.00333 | 0.00539 | 0.00281 |
| 13482 | 1886.83 | 124.5 | 3.50 | 0.30  | 0.0264 | 0.0509 | 32.74 | 1.692 | 4.847  | 3.1295 | 0.00481  | 0.04840 | -0.00673 | 0.00154  | 0.01547 | -0.00215 | 0.00450 | 0.00516 | 0.00315 |
| 13483 | 1888.99 | 124.0 | 3.51 | 0.28  | 0.0308 | 0.0505 | 32.86 | 1.691 | 4.981  | 3.1339 | 0.00259  | 0.04812 | -0.00631 | 0.00083  | 0.01535 | -0.00201 | 0.00379 | 0.00505 | 0.00329 |
| 13484 | 1888.13 | 124.8 | 3.50 | 0.30  | 0.0243 | 0.0535 | 32.99 | 1.691 | 5.102  | 3.1322 | 0.00417  | 0.04534 | -0.00405 | 0.00133  | 0.01448 | -0.00129 | 0.00429 | 0.00417 | 0.00401 |
| 13485 | 1886.98 | 125.2 | 3.50 | 0.29  | 0.0260 | 0.0488 | 33.11 | 1.691 | 5.229  | 3.1299 | 0.00235  | 0.04547 | -0.00811 | 0.00075  | 0.01453 | -0.00259 | 0.00371 | 0.00422 | 0.00271 |
| 13486 | 1888.99 | 124.3 | 3.51 | 0.28  | 0.0263 | 0.0480 | 33.24 | 1.691 | 5.364  | 3.1342 | 0.00138  | 0.04454 | -0.00845 | 0.00044  | 0.01421 | -0.00270 | 0.00340 | 0.00391 | 0.00260 |
| 13487 | 1888.70 | 124.1 | 3.51 | 0.29  | 0.0246 | 0.0518 | 33.36 | 1.691 | 5.482  | 3.1323 | 0.00073  | 0.04587 | -0.00597 | 0.00023  | 0.01464 | -0.00191 | 0.00319 | 0.00434 | 0.00339 |
| 13488 | 1887.84 | 124.9 | 3.50 | 0.29  | 0.0287 | 0.0447 | 33.49 | 1.691 | 5.604  | 3.1312 | 0.00079  | 0.04370 | -0.00550 | 0.00025  | 0.01396 | -0.00176 | 0.00321 | 0.00365 | 0.00354 |
| 13489 | 1886.83 | 125.0 | 3.50 | 0.30  | 0.0257 | 0.0477 | 33.61 | 1.692 | 5.721  | 3.1297 | 0.00176  | 0.04354 | -0.00533 | 0.00056  | 0.01391 | -0.00170 | 0.00352 | 0.00361 | 0.00360 |
| 13490 | 1889.28 | 123.8 | 3.51 | 0.29  | 0.0229 | 0.0517 | 33.74 | 1.691 | 5.860  | 3.1338 | 0.00060  | 0.04500 | -0.00215 | 0.00019  | 0.01436 | -0.00069 | 0.00315 | 0.00406 | 0.00461 |
| 13491 | 1888.70 | 123.7 | 3.51 | 0.30  | 0.0263 | 0.0527 | 33.87 | 1.692 | 5.974  | 3.1343 | 0.00089  | 0.04447 | -0.00447 | 0.00029  | 0.01419 | -0.00143 | 0.00325 | 0.00389 | 0.00387 |
| 13492 | 1887.70 | 124.5 | 3.50 | 0.29  | 0.0226 | 0.0516 | 33.99 | 1.691 | 6.110  | 3.1300 | 0.00205  | 0.04754 | -0.00210 | 0.00066  | 0.01519 | -0.00067 | 0.00362 | 0.00489 | 0.00463 |
| 13493 | 1886.98 | 124.3 | 3.50 | 0.29  | 0.0239 | 0.0561 | 34.11 | 1.691 | 6.233  | 3.1303 | 0.00422  | 0.04813 | -0.00352 | 0.00135  | 0.01538 | -0.00112 | 0.00431 | 0.00507 | 0.00418 |
| 13494 | 1888.85 | 123.6 | 3.51 | 0.27  | 0.0215 | 0.0556 | 34.24 | 1.690 | 6.374  | 3.1323 | 0.00351  | 0.04770 | -0.00026 | 0.00112  | 0.01523 | -0.00008 | 0.00408 | 0.00493 | 0.00522 |
| 13495 | 1887.84 | 124.2 | 3.51 | 0.29  | 0.0222 | 0.0561 | 34.36 | 1.691 | 6.488  | 3.1317 | 0.00422  | 0.04971 | -0.00508 | 0.00135  | 0.01587 | -0.00162 | 0.00431 | 0.00557 | 0.00368 |
| 13496 | 1887.70 | 124.5 | 3.50 | 0.27  | 0.0195 | 0.0545 | 34.36 | 1.690 | 6.501  | 3.1316 | 0.00427  | 0.04702 | -0.00461 | 0.00136  | 0.01501 | -0.00147 | 0.00432 | 0.00471 | 0.00383 |
| 13497 | 1886.98 | 124.6 | 3.50 | 0.27  | 0.0226 | 0.0609 | 34.49 | 1.690 | 6.624  | 3.1309 | 0.00234  | 0.04933 | -0.00444 | 0.00075  | 0.01576 | -0.00142 | 0.00371 | 0.00545 | 0.00388 |
| 13498 | 1888.85 | 123.8 | 3.51 | 0.27  | 0.0171 | 0.0653 | 34.61 | 1.690 | 6.755  | 3.1332 | 0.00388  | 0.04873 | -0.00585 | 0.00124  | 0.01555 | -0.00187 | 0.00420 | 0.00525 | 0.00343 |
| 13499 | 1888.27 | 124.3 | 3.51 | 0.29  | 0.0256 | 0.0617 | 34.74 | 1.691 | 6.860  | 3.1327 | 0.00633  | 0.05251 | -0.00816 | 0.00202  | 0.01676 | -0.00260 | 0.00498 | 0.00646 | 0.00270 |
| 13500 | 1887.55 | 124.7 | 3.50 | 0.27  | 0.0198 | 0.0678 | 34.86 | 1.690 | 7.003  | 3.1301 | 0.00835  | 0.05257 | -0.00408 | 0.00267  | 0.01680 | -0.00130 | 0.00563 | 0.00649 | 0.00400 |
| 13501 | 1886.83 | 124.6 | 3.50 | 0.28  | 0.0174 | 0.0683 | 34.99 | 1.690 | 7.120  | 3.1304 | 0.00489  | 0.05049 | -0.00490 | 0.00156  | 0.01613 | -0.00157 | 0.00452 | 0.00583 | 0.00374 |
| 13502 | 1888.70 | 123.8 | 3.51 | 0.27  | 0.0177 | 0.0629 | 35.12 | 1.690 | 7.254  | 3.1325 | 0.00695  | 0.05071 | -0.00285 | 0.00222  | 0.01619 | -0.00091 | 0.00518 | 0.00589 | 0.00439 |
| 13503 | 1888.42 | 124.2 | 3.51 | 0.28  | 0.0174 | 0.0618 | 35.24 | 1.690 | 7.374  | 3.1320 | 0.00515  | 0.05108 | -0.00054 | 0.00165  | 0.01631 | -0.00017 | 0.00461 | 0.00601 | 0.00513 |
| 13504 | 1887.12 | 124.6 | 3.50 | 0.28  | 0.0202 | 0.0605 | 35.36 | 1.690 | 7.496  | 3.1310 | 0.00683  | 0.05075 | -0.00312 | 0.00218  | 0.01621 | -0.00100 | 0.00514 | 0.00591 | 0.00430 |
| 13505 | 1888.85 | 123.9 | 3.51 | 0.29  | 0.0188 | 0.0532 | 35.49 | 1.691 | 7.616  | 3.1343 | 0.00647  | 0.04796 | -0.00178 | 0.00206  | 0.01530 | -0.00057 | 0.00502 | 0.00500 | 0.00473 |
| 13506 | 1886.40 | 125.0 | 3.50 | 0.29  | 0.0226 | 0.0572 | 35.49 | 1.691 | 7.609  | 3.1295 | 0.00910  | 0.04943 | -0.00017 | 0.00291  | 0.01579 | -0.00006 | 0.00587 | 0.00549 | 0.00525 |
| 13507 | 1888.70 | 123.8 | 3.51 | 0.28  | 0.0184 | 0.0549 | 35.61 | 1.690 | 7.746  | 3.1342 | 0.00473  | 0.04759 | -0.00045 | 0.00151  | 0.01518 | -0.00014 | 0.00447 | 0.00488 | 0.00516 |
| 13508 | 1889.86 | 123.5 | 3.52 | 0.29  | 0.0181 | 0.0640 | 35.74 | 1.691 | 7.865  | 3.1349 | 0.00434  | 0.04432 | -0.00002 | 0.00138  | 0.01414 | -0.00001 | 0.00434 | 0.00383 | 0.00529 |
| 13509 | 1887.98 | 124.6 | 3.50 | 0.28  | 0.0188 | 0.0588 | 35.87 | 1.690 | 8.000  | 3.1309 | 0.00332  | 0.04295 | -0.00124 | 0.00106  | 0.01372 | -0.00040 | 0.00402 | 0.00342 | 0.00490 |
| 13510 | 1888.56 | 124.1 | 3.51 | 0.28  | 0.0174 | 0.0608 | 35.87 | 1.690 | 7.999  | 3.1331 | 0.00086  | 0.04052 | 0.00012  | 0.00027  | 0.01293 | 0.00004  | 0.00323 | 0.00263 | 0.00534 |
| 13511 | 1887.12 | 124.9 | 3.50 | 0.28  | 0.0191 | 0.0646 | 35.99 | 1.690 | 8.120  | 3.1300 | 0.00169  | 0.03891 | 0.00034  | 0.00054  | 0.01243 | 0.00011  | 0.00350 | 0.00213 | 0.00541 |
| 13512 | 1885.97 | 124.4 | 3.50 | 0.28  | 0.0161 | 0.0620 | 36.12 | 1.690 | 8.249  | 3.1286 | -0.00390 | 0.03676 | 0.00125  | -0.00125 | 0.01175 | 0.00040  | 0.00171 | 0.00145 | 0.00570 |
| 13513 | 1889.86 | 123.3 | 3.52 | 0.29  | 0.0201 | 0.0614 |       |       |        |        |          |         |          |          |         |          |         |         |         |



Table A22. Concluded.

Run = 201

M = 1.60

xsppos = 42.353

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xbeta  | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 13533 | 1887.84 | 124.5 | 3.50 | 0.30  | 0.0233 | 0.0464 | 38.24 | 1.692 | 10.348 | 3.1312 | -0.02581 | 0.00790 | -0.03364 | -0.00824 | 0.00252 | -0.01074 | -0.00528 | -0.00778 | -0.00544 |
| 13534 | 1886.54 | 124.8 | 3.50 | 0.31  | 0.0236 | 0.0475 | 38.37 | 1.692 | 10.466 | 3.1292 | -0.02846 | 0.00520 | -0.03635 | -0.00910 | 0.00166 | -0.01162 | -0.00614 | -0.00864 | -0.00632 |
| 13535 | 1890.00 | 123.5 | 3.52 | 0.30  | 0.0260 | 0.0441 | 38.49 | 1.692 | 10.597 | 3.1340 | -0.03040 | 0.00464 | -0.03927 | -0.00970 | 0.00148 | -0.01253 | -0.00674 | -0.00882 | -0.00723 |
| 13536 | 1888.85 | 123.5 | 3.51 | 0.31  | 0.0270 | 0.0400 | 38.61 | 1.692 | 10.711 | 3.1338 | -0.03390 | 0.00021 | -0.04413 | -0.01082 | 0.00007 | -0.01408 | -0.00786 | -0.01023 | -0.00878 |
| 13537 | 1887.41 | 124.5 | 3.50 | 0.30  | 0.0260 | 0.0451 | 38.74 | 1.691 | 10.854 | 3.1306 | -0.03384 | 0.00302 | -0.04499 | -0.01081 | 0.00096 | -0.01437 | -0.00785 | -0.00934 | -0.00907 |
| 13538 | 1886.54 | 124.5 | 3.50 | 0.30  | 0.0284 | 0.0446 | 38.87 | 1.692 | 10.970 | 3.1293 | -0.03415 | 0.00497 | -0.04431 | -0.01091 | 0.00159 | -0.01416 | -0.00795 | -0.00871 | -0.00886 |
| 13539 | 1887.70 | 124.4 | 3.50 | 0.28  | 0.0253 | 0.0456 | 38.87 | 1.691 | 10.988 | 3.1308 | -0.03409 | 0.00497 | -0.04143 | -0.01089 | 0.00159 | -0.01323 | -0.00793 | -0.00871 | -0.00793 |
| 13540 | 1886.83 | 124.8 | 3.50 | 0.28  | 0.0240 | 0.0514 | 38.99 | 1.691 | 11.116 | 3.1297 | -0.02586 | 0.01244 | -0.04045 | -0.00826 | 0.00398 | -0.01292 | -0.00530 | -0.00633 | -0.00762 |
| 13541 | 1889.86 | 123.4 | 3.52 | 0.29  | 0.0256 | 0.0486 | 39.11 | 1.691 | 11.229 | 3.1361 | -0.02801 | 0.01138 | -0.03889 | -0.00893 | 0.00363 | -0.01240 | -0.00597 | -0.00667 | -0.00710 |
| 13542 | 1888.27 | 123.9 | 3.51 | 0.28  | 0.0253 | 0.0522 | 39.24 | 1.691 | 11.366 | 3.1318 | -0.02192 | 0.01852 | -0.04048 | -0.00700 | 0.00591 | -0.01293 | -0.00404 | -0.00439 | -0.00763 |
| 13543 | 1886.98 | 124.7 | 3.50 | 0.29  | 0.0239 | 0.0570 | 39.37 | 1.691 | 11.490 | 3.1311 | -0.02123 | 0.01927 | -0.04036 | -0.00678 | 0.00615 | -0.01289 | -0.00382 | -0.00415 | -0.00759 |
| 13544 | 1888.42 | 123.8 | 3.51 | 0.28  | 0.0274 | 0.0579 | 39.49 | 1.691 | 11.608 | 3.1323 | -0.01784 | 0.02146 | -0.03806 | -0.00570 | 0.00685 | -0.01215 | -0.00274 | -0.00345 | -0.00685 |
| 13545 | 1888.85 | 123.7 | 3.51 | 0.29  | 0.0256 | 0.0598 | 39.62 | 1.691 | 11.735 | 3.1327 | -0.01435 | 0.02626 | -0.04122 | -0.00458 | 0.00838 | -0.01316 | -0.00162 | -0.00192 | -0.00786 |
| 13546 | 1887.55 | 124.5 | 3.50 | 0.30  | 0.0239 | 0.0598 | 39.74 | 1.691 | 11.856 | 3.1309 | -0.01433 | 0.03085 | -0.03865 | -0.00458 | 0.00985 | -0.01235 | -0.00162 | -0.00045 | -0.00705 |
| 13547 | 1889.14 | 123.4 | 3.52 | 0.29  | 0.0277 | 0.0516 | 39.74 | 1.691 | 11.854 | 3.1323 | -0.01436 | 0.02792 | -0.03907 | -0.00458 | 0.00891 | -0.01247 | -0.00162 | -0.00139 | -0.00717 |
| 13548 | 1887.26 | 124.3 | 3.50 | 0.29  | 0.0250 | 0.0511 | 39.87 | 1.691 | 11.985 | 3.1298 | -0.01352 | 0.03317 | -0.03438 | -0.00432 | 0.01060 | -0.01098 | -0.00136 | -0.00030 | -0.00568 |
| 13549 | 1886.54 | 124.3 | 3.50 | 0.29  | 0.0250 | 0.0511 | 39.99 | 1.691 | 12.110 | 3.1295 | -0.01129 | 0.03198 | -0.03276 | -0.00361 | 0.01022 | -0.01047 | -0.00065 | -0.00008 | -0.00517 |
| 13550 | 1888.70 | 123.5 | 3.51 | 0.29  | 0.0291 | 0.0477 | 40.12 | 1.691 | 12.230 | 3.1331 | -0.01302 | 0.03254 | -0.03282 | -0.00416 | 0.01039 | -0.01047 | -0.00120 | -0.00009 | -0.00517 |
| 13551 | 1887.84 | 124.4 | 3.50 | 0.29  | 0.0281 | 0.0537 | 40.24 | 1.691 | 12.352 | 3.1311 | -0.01112 | 0.03163 | -0.02839 | -0.00355 | 0.01010 | -0.00907 | -0.00059 | -0.00020 | -0.00377 |
| 13552 | 1886.54 | 124.6 | 3.50 | 0.29  | 0.0250 | 0.0567 | 40.37 | 1.691 | 12.484 | 3.1298 | -0.01137 | 0.03123 | -0.02690 | -0.00363 | 0.00998 | -0.00859 | -0.00067 | -0.00032 | -0.00329 |
| 13553 | 1888.56 | 123.4 | 3.51 | 0.29  | 0.0263 | 0.0499 | 40.49 | 1.691 | 12.606 | 3.1324 | -0.01137 | 0.03096 | -0.02918 | -0.00363 | 0.00988 | -0.00931 | -0.00067 | -0.00042 | -0.00401 |
| 13554 | 1887.84 | 124.2 | 3.51 | 0.29  | 0.0243 | 0.0507 | 40.62 | 1.691 | 12.737 | 3.1313 | -0.01208 | 0.02896 | -0.02551 | -0.00386 | 0.00925 | -0.00815 | -0.00090 | -0.00105 | -0.00285 |
| 13555 | 1886.69 | 124.6 | 3.50 | 0.28  | 0.0246 | 0.0472 | 40.74 | 1.691 | 12.867 | 3.1296 | -0.01157 | 0.02710 | -0.02615 | -0.00370 | 0.00866 | -0.00836 | -0.00074 | -0.00164 | -0.00305 |
| 13556 | 1889.42 | 123.8 | 3.51 | 0.29  | 0.0256 | 0.0514 | 40.86 | 1.691 | 12.979 | 3.1341 | -0.01281 | 0.02697 | -0.02778 | -0.00409 | 0.00861 | -0.00886 | -0.00113 | -0.00170 | -0.00356 |
| 13557 | 1888.42 | 123.8 | 3.51 | 0.29  | 0.0256 | 0.0523 | 40.99 | 1.691 | 13.107 | 3.1339 | -0.01667 | 0.02318 | -0.02992 | -0.00532 | 0.00740 | -0.00955 | -0.00236 | -0.00291 | -0.00425 |
| 13558 | 1887.70 | 124.5 | 3.50 | 0.29  | 0.0277 | 0.0460 | 41.12 | 1.691 | 13.232 | 3.1308 | -0.01454 | 0.02315 | -0.02552 | -0.00464 | 0.00740 | -0.00815 | -0.00168 | -0.00291 | -0.00285 |
| 13559 | 1886.69 | 124.6 | 3.50 | 0.29  | 0.0267 | 0.0455 | 41.24 | 1.691 | 13.358 | 3.1298 | -0.01703 | 0.02121 | -0.02620 | -0.00544 | 0.00678 | -0.00837 | -0.00248 | -0.00353 | -0.00307 |
| 13560 | 1889.28 | 123.4 | 3.52 | 0.29  | 0.0277 | 0.0497 | 41.37 | 1.691 | 13.479 | 3.1344 | -0.01740 | 0.02183 | -0.02542 | -0.00555 | 0.00696 | -0.00811 | -0.00259 | -0.00334 | -0.00281 |
| 13561 | 1887.55 | 124.6 | 3.50 | 0.30  | 0.0253 | 0.0540 | 41.37 | 1.692 | 13.475 | 3.1311 | -0.01867 | 0.02263 | -0.02466 | -0.00596 | 0.00723 | -0.00788 | -0.00300 | -0.00307 | -0.00257 |
| 13562 | 1886.69 | 124.5 | 3.50 | 0.29  | 0.0233 | 0.0576 | 41.49 | 1.691 | 13.611 | 3.1300 | -0.01833 | 0.02633 | -0.02442 | -0.00586 | 0.00841 | -0.00780 | -0.00290 | -0.00189 | -0.00250 |
| 13563 | 1889.14 | 123.5 | 3.51 | 0.30  | 0.0260 | 0.0534 | 41.61 | 1.692 | 13.725 | 3.1337 | -0.01588 | 0.02828 | -0.02300 | -0.00507 | 0.00902 | -0.00734 | -0.00211 | -0.00128 | -0.00204 |
| 13564 | 1888.13 | 124.1 | 3.51 | 0.30  | 0.0239 | 0.0598 | 41.74 | 1.692 | 13.850 | 3.1325 | -0.01183 | 0.03180 | -0.02550 | -0.00378 | 0.01015 | -0.00814 | -0.00082 | -0.00015 | -0.00284 |
| 13565 | 1887.55 | 124.7 | 3.50 | 0.29  | 0.0222 | 0.0607 | 41.86 | 1.691 | 13.986 | 3.1310 | -0.00903 | 0.03237 | -0.02478 | -0.00288 | 0.01034 | -0.00792 | 0.00007  | 0.00004  | -0.00261 |
| 13566 | 1886.54 | 124.4 | 3.50 | 0.32  | 0.0243 | 0.0554 | 41.99 | 1.693 | 14.084 | 3.1298 | -0.00785 | 0.03081 | -0.02465 | -0.00251 | 0.00984 | -0.00788 | 0.00045  | -0.00046 | -0.00258 |
| 13567 | 1889.14 | 123.3 | 3.52 | 0.32  | 0.0249 | 0.0585 | 42.11 | 1.693 | 14.209 | 3.1337 | -0.01104 | 0.02778 | -0.02518 | -0.00352 | 0.00886 | -0.00804 | -0.00056 | -0.00144 | -0.00273 |
| 13568 | 1886.69 | 124.0 | 3.51 | 0.30  | 0.0240 | 0.0533 | 42.11 | 1.692 | 14.222 | 3.1293 | -0.00945 | 0.02751 | -0.02324 | -0.00302 | 0.00879 | -0.00743 | -0.00006 | -0.00151 | -0.00213 |
| 13569 | 1888.99 | 123.4 | 3.52 | 0.30  | 0.0260 | 0.0544 | 42.24 | 1.692 | 14.350 | 3.1325 | -0.01220 | 0.02644 | -0.02348 | -0.00390 | 0.00844 | -0.00750 | -0.00094 | -0.00186 | -0.00219 |
| 13570 | 1887.98 | 124.1 | 3.51 | 0.30  | 0.0274 | 0.0458 | 42.37 | 1.692 | 14.472 | 3.1322 | -0.01499 | 0.02270 | -0.02821 | -0.00478 | 0.00725 | -0.00901 | -0.00182 | -0.00305 | -0.00371 |
| 13571 | 1887.26 | 124.8 | 3.50 | 0.30  | 0.0250 | 0.0492 | 42.49 | 1.691 | 14.604 | 3.1308 | -0.01656 | 0.02531 | -0.02876 | -0.00529 | 0.00809 | -0.00919 | -0.00233 | -0.00222 | -0.00389 |
| 13572 | 1887.12 | 124.2 | 3.51 | 0.29  | 0.0277 | 0.0516 | 42.61 | 1.692 | 14.725 | 3.1307 | -0.01591 | 0.03032 | -0.02520 | -0.00508 | 0.00968 | -0.00805 | -0.00212 | -0.00062 | -0.00275 |
| 13573 | 1889.28 | 123.4 | 3.52 | 0.30  | 0.0243 | 0.0525 | 42.74 | 1.692 | 14.847 | 3.1331 | -0.01240 | 0.03461 | -0.02214 | -0.00396 | 0.01105 | -0.00707 | -0.00100 | 0.00074  | -0.00177 |
| 13574 | 1888.13 | 124.1 | 3.51 | 0.28  | 0.0243 | 0.0562 | 42.86 | 1.691 | 14.988 | 3.1318 | -0.00844 | 0.03719 | -0.02142 | -0.00269 | 0.01188 | -0.00684 | 0.00026  | 0.00157  | -0.00154 |
| 13575 | 1887.26 | 124.8 | 3.50 | 0.29  | 0.0195 | 0.0574 | 42.99 | 1.691 | 15.116 | 3.1306 | -0.00695 | 0.03644 | -0.01986 | -0.00222 | 0.01164 | -0.00634 | 0.00074  | 0.00134  | -0.00104 |
| 13576 | 1888.70 | 123.9 | 3.51 | 0.30  | 0.0256 | 0.0561 | 43.11 | 1.691 | 15.226 | 3.1328 | -0.00473 | 0.03746 | -0.01892 | -0.00151 | 0.01196 | -0.00604 | 0.00145  | 0.00165  | -0.00074 |
| 13577 | 1888.99 | 123.4 | 3.51 | 0.29  | 0.0263 | 0.0527 | 43.24 | 1.691 | 15.355 | 3.1331 | -0.00707 | 0.03501 | -0.02006 | -0.00226 | 0.01118 | -0.00640 | 0.00070  | 0.00087  | -0.00110 |
| 13578 | 1888.13 | 124.3 | 3.51 | 0.30  | 0.0284 | 0.0520 | 43.36 | 1.692 | 15.469 | 3.1307 | -0.00659 | 0.03625 | -0.02360 | -0.00211 | 0.01158 | -0.00754 | 0.00085  | 0.00128  | -0.00224 |
| 13579 | 1886.83 | 124.5 | 3.50 | 0.29  | 0.0277 | 0.0544 | 43.49 | 1.692 | 15.601 | 3.1307 | -0.00698 | 0.03317 | -0.03050 | -0.00223 | 0.01059 | -0.00974 | 0.00073  | 0.00029  | -0.00444 |
| 13580 | 1887.70 | 124.7 | 3.50 | 0.28  | 0.0226 | 0.0553 | 43.49 | 1.690 | 15.621 | 3.1306 | -0.00703 | 0.03332 | -0.02534 | -0.00225 | 0.01064 | -0.00809 | 0.00071  | 0.00034  | -0.00279 |
| 13581 | 1886.54 | 124.6 | 3.50 | 0.29  | 0.0233 | 0.0576 | 43.62 | 1.691 | 15.738 | 3.1297 | -0.00856 | 0.03353 | -0.02651 | -0.00273 | 0.01071 | -0.00847 | 0.00023  | 0.00041  | -0.00317 |
| 13582 | 1889.71 | 123.4 | 3.52 | 0.28  | 0.0215 | 0.0621 | 43.74 | 1.691 | 15.866 | 3.1349 | -0.00926 | 0.03198 | -0.02460 | -0.00295 | 0.01020 | -0.00785 | 0.00001  | -0.00010 | -0.00255 |
| 13583 | 1888.13 | 123.8 | 3.51 | 0.28  | 0.0229 | 0.0592 | 43.87 | 1.691 | 15.992 | 3.1322 | -0.01020 | 0.03207 | -0.02184 | -0.00326 | 0.01024 | -0.00697 | -0.00030 | -0.00006 | -0.00167 |
| 13584 | 1887.55 | 124.3 | 3.50 | 0.28  | 0.0239 | 0.0617 | 43.99 | 1.691 | 16.113 | 3.1315 | -0.01035 | 0.03241 | -0.01707 | -0.00330 | 0.01035 | -0.00545 | -0.00034 | 0.00005  | -0.00015 |
| 13585 | 1889.28 | 123.5 | 3.52 | 0.28  | 0.0225 | 0.0636 | 43.99 | 1.691 | 16.114 | 3.1337 | -0.00961 | 0.03258 | -0.01697 | -0.00307 | 0.01040 | -0.00541 | -0.00011 | 0.00009  | -0.00011 |
| 13586 | 1888.56 |       |      |       |        |        |       |       |        |        |          |         |          |          |         |          |          |          |          |

Table A23. Run 202.

Run = 202

M = 1.60

xsppos = 42.350

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 13615 | 1888.99 | 123.4 | 3.52 | 0.29  | 0.0239 | 0.0495 | 21.36 | 1.691 | -6.517 | 3.1335 | -0.01103 | 0.03347 | -0.01913 | -0.00352 | 0.01068 | -0.00611 | 0.00010  | -0.00004 | -0.00014 |
| 13616 | 1888.42 | 124.0 | 3.51 | 0.29  | 0.0229 | 0.0499 | 21.49 | 1.691 | -6.391 | 3.1323 | -0.01094 | 0.03430 | -0.01673 | -0.00349 | 0.01095 | -0.00534 | 0.00013  | 0.00023  | 0.00062  |
| 13617 | 1888.85 | 123.5 | 3.51 | 0.28  | 0.0215 | 0.0491 | 21.61 | 1.690 | -6.258 | 3.1338 | -0.01154 | 0.03310 | -0.01962 | -0.00368 | 0.01056 | -0.00626 | -0.00006 | -0.00016 | -0.00030 |
| 13618 | 1888.13 | 124.2 | 3.51 | 0.29  | 0.0267 | 0.0436 | 21.74 | 1.691 | -6.147 | 3.1322 | -0.01147 | 0.03268 | -0.02077 | -0.00366 | 0.01043 | -0.00663 | -0.00004 | -0.00029 | -0.00067 |
| 13619 | 1887.26 | 124.7 | 3.50 | 0.28  | 0.0253 | 0.0438 | 21.86 | 1.691 | -6.014 | 3.1303 | -0.01174 | 0.03441 | -0.01712 | -0.00375 | 0.01099 | -0.00547 | -0.00013 | 0.00027  | 0.00049  |
| 13620 | 1888.42 | 124.1 | 3.51 | 0.28  | 0.0239 | 0.0449 | 21.99 | 1.691 | -5.887 | 3.1320 | -0.00926 | 0.03454 | -0.01598 | -0.00296 | 0.01103 | -0.00510 | 0.00066  | 0.00031  | 0.00086  |
| 13621 | 1888.70 | 123.6 | 3.51 | 0.29  | 0.0208 | 0.0515 | 22.11 | 1.691 | -5.762 | 3.1335 | -0.01103 | 0.03284 | -0.01897 | -0.00352 | 0.01048 | -0.00606 | 0.00010  | -0.00024 | -0.00009 |
| 13622 | 1888.27 | 124.4 | 3.51 | 0.29  | 0.0257 | 0.0468 | 22.24 | 1.691 | -5.641 | 3.1321 | -0.01090 | 0.03515 | -0.02166 | -0.00348 | 0.01122 | -0.00692 | 0.00014  | 0.00050  | -0.00095 |
| 13623 | 1886.98 | 124.9 | 3.50 | 0.28  | 0.0212 | 0.0518 | 22.36 | 1.690 | -5.505 | 3.1300 | -0.00999 | 0.03441 | -0.01726 | -0.00319 | 0.01099 | -0.00551 | 0.00043  | 0.00027  | 0.00045  |
| 13624 | 1889.14 | 123.9 | 3.51 | 0.28  | 0.0219 | 0.0521 | 22.49 | 1.691 | -5.383 | 3.1338 | -0.01091 | 0.03376 | -0.01794 | -0.00348 | 0.01077 | -0.00572 | 0.00014  | 0.00005  | 0.00024  |
| 13625 | 1888.27 | 123.8 | 3.51 | 0.28  | 0.0222 | 0.0570 | 22.61 | 1.690 | -5.256 | 3.1315 | -0.00954 | 0.03529 | -0.01651 | -0.00305 | 0.01127 | -0.00527 | 0.00058  | 0.00055  | 0.00069  |
| 13626 | 1887.98 | 124.5 | 3.50 | 0.28  | 0.0232 | 0.0613 | 22.74 | 1.691 | -5.136 | 3.1316 | -0.00950 | 0.03381 | -0.01858 | -0.00303 | 0.01080 | -0.00593 | 0.00059  | 0.00007  | 0.00003  |
| 13627 | 1886.69 | 124.6 | 3.50 | 0.28  | 0.0233 | 0.0576 | 22.74 | 1.691 | -5.139 | 3.1307 | -0.01148 | 0.03511 | -0.01802 | -0.00367 | 0.01122 | -0.00576 | -0.00005 | 0.00049  | 0.00021  |
| 13628 | 1889.42 | 123.5 | 3.51 | 0.29  | 0.0229 | 0.0638 | 22.86 | 1.691 | -5.019 | 3.1332 | -0.00839 | 0.03482 | -0.01789 | -0.00268 | 0.01111 | -0.00571 | 0.00094  | 0.00039  | 0.00025  |
| 13629 | 1888.56 | 124.1 | 3.51 | 0.29  | 0.0225 | 0.0646 | 22.99 | 1.691 | -4.895 | 3.1317 | -0.01022 | 0.03562 | -0.01680 | -0.00326 | 0.01138 | -0.00536 | 0.00036  | 0.00065  | 0.00060  |
| 13630 | 1886.54 | 124.7 | 3.50 | 0.29  | 0.0205 | 0.0682 | 23.11 | 1.691 | -4.761 | 3.1297 | -0.01044 | 0.03363 | -0.01694 | -0.00334 | 0.01074 | -0.00541 | 0.00029  | 0.00002  | 0.00055  |
| 13631 | 1889.28 | 123.4 | 3.52 | 0.28  | 0.0198 | 0.0714 | 23.24 | 1.690 | -4.631 | 3.1334 | -0.01018 | 0.03381 | -0.01999 | -0.00325 | 0.01079 | -0.00638 | 0.00037  | 0.00007  | -0.00042 |
| 13632 | 1888.27 | 123.9 | 3.51 | 0.29  | 0.0215 | 0.0687 | 23.36 | 1.691 | -4.514 | 3.1309 | -0.00855 | 0.03568 | -0.01611 | -0.00273 | 0.01139 | -0.00515 | 0.00089  | 0.00067  | 0.00082  |
| 13633 | 1887.41 | 124.9 | 3.50 | 0.29  | 0.0226 | 0.0656 | 23.49 | 1.691 | -4.393 | 3.1319 | -0.01100 | 0.03276 | -0.01939 | -0.00351 | 0.01046 | -0.00619 | 0.00011  | -0.00026 | -0.00023 |
| 13634 | 1886.54 | 124.6 | 3.50 | 0.30  | 0.0219 | 0.0596 | 23.61 | 1.692 | -4.278 | 3.1293 | -0.00817 | 0.03408 | -0.01634 | -0.00261 | 0.01089 | -0.00522 | 0.00101  | 0.00017  | 0.00074  |
| 13635 | 1889.42 | 123.3 | 3.52 | 0.29  | 0.0225 | 0.0581 | 23.74 | 1.691 | -4.141 | 3.1339 | -0.00986 | 0.03476 | -0.01739 | -0.00315 | 0.01109 | -0.00555 | 0.00047  | 0.00037  | 0.00041  |
| 13636 | 1888.13 | 123.8 | 3.51 | 0.30  | 0.0226 | 0.0478 | 23.87 | 1.692 | -4.023 | 3.1307 | -0.00932 | 0.03648 | -0.01685 | -0.00298 | 0.01165 | -0.00538 | 0.00064  | 0.00093  | 0.00058  |
| 13637 | 1887.26 | 124.5 | 3.50 | 0.29  | 0.0212 | 0.0443 | 23.99 | 1.691 | -3.889 | 3.1304 | -0.00906 | 0.03434 | -0.01849 | -0.00289 | 0.01097 | -0.00591 | 0.00073  | 0.00025  | 0.00006  |
| 13638 | 1886.26 | 124.1 | 3.50 | 0.29  | 0.0250 | 0.0390 | 24.11 | 1.691 | -3.770 | 3.1290 | -0.01068 | 0.03384 | -0.01910 | -0.00341 | 0.01081 | -0.00610 | 0.00021  | 0.00009  | -0.00014 |
| 13639 | 1889.57 | 123.2 | 3.52 | 0.29  | 0.0274 | 0.0374 | 24.24 | 1.691 | -3.642 | 3.1338 | -0.00899 | 0.03498 | -0.01964 | -0.00287 | 0.01116 | -0.00627 | 0.00075  | 0.00044  | -0.00031 |
| 13640 | 1888.27 | 123.9 | 3.51 | 0.29  | 0.0236 | 0.0465 | 24.36 | 1.691 | -3.519 | 3.1324 | -0.00914 | 0.03490 | -0.01801 | -0.00292 | 0.01114 | -0.00575 | 0.00071  | 0.00042  | 0.00021  |
| 13641 | 1887.26 | 124.7 | 3.50 | 0.29  | 0.0253 | 0.0475 | 24.49 | 1.691 | -3.394 | 3.1298 | -0.00982 | 0.03616 | -0.01846 | -0.00314 | 0.01155 | -0.00590 | 0.00048  | 0.00083  | 0.00006  |
| 13642 | 1886.69 | 124.3 | 3.50 | 0.29  | 0.0257 | 0.0487 | 24.61 | 1.691 | -3.272 | 3.1288 | -0.00879 | 0.03699 | -0.01676 | -0.00281 | 0.01182 | -0.00536 | 0.00081  | 0.00110  | 0.00060  |
| 13643 | 1889.28 | 123.2 | 3.52 | 0.29  | 0.0232 | 0.0519 | 24.74 | 1.691 | -3.141 | 3.1338 | -0.00969 | 0.03730 | -0.01622 | -0.00309 | 0.01190 | -0.00518 | 0.00053  | 0.00118  | 0.00078  |
| 13644 | 1888.13 | 124.0 | 3.51 | 0.30  | 0.0263 | 0.0499 | 24.87 | 1.692 | -3.029 | 3.1325 | -0.01054 | 0.03748 | -0.01989 | -0.00336 | 0.01196 | -0.00635 | 0.00026  | 0.00124  | -0.00039 |
| 13645 | 1889.14 | 123.4 | 3.52 | 0.30  | 0.0236 | 0.0521 | 24.99 | 1.691 | -2.898 | 3.1344 | -0.00828 | 0.03494 | -0.02139 | -0.00264 | 0.01115 | -0.00682 | 0.00098  | 0.00042  | -0.00086 |
| 13646 | 1887.84 | 124.2 | 3.51 | 0.30  | 0.0236 | 0.0466 | 25.11 | 1.691 | -2.773 | 3.1309 | -0.00843 | 0.03449 | -0.01833 | -0.00269 | 0.01102 | -0.00585 | 0.00093  | 0.00029  | 0.00011  |
| 13647 | 1886.98 | 124.7 | 3.50 | 0.29  | 0.0205 | 0.0495 | 25.24 | 1.691 | -2.639 | 3.1304 | -0.01002 | 0.03228 | -0.01972 | -0.00320 | 0.01031 | -0.00630 | 0.00042  | -0.00041 | -0.00034 |
| 13648 | 1887.55 | 124.3 | 3.50 | 0.30  | 0.0195 | 0.0536 | 25.37 | 1.691 | -2.522 | 3.1304 | -0.00914 | 0.03279 | -0.01688 | -0.00292 | 0.01047 | -0.00539 | 0.00070  | 0.00025  | 0.00057  |
| 13649 | 1886.98 | 124.8 | 3.50 | 0.30  | 0.0188 | 0.0579 | 25.49 | 1.691 | -2.391 | 3.1308 | -0.01230 | 0.03354 | -0.02028 | -0.00393 | 0.01071 | -0.00648 | -0.00031 | -0.00001 | -0.00052 |
| 13650 | 1889.57 | 123.7 | 3.51 | 0.30  | 0.0208 | 0.0618 | 25.61 | 1.692 | -2.275 | 3.1346 | -0.01107 | 0.03792 | -0.01632 | -0.00353 | 0.01210 | -0.00521 | 0.00009  | 0.00137  | 0.00075  |
| 13651 | 1888.42 | 123.5 | 3.51 | 0.29  | 0.0164 | 0.0640 | 25.74 | 1.691 | -2.136 | 3.1329 | -0.00963 | 0.04063 | -0.01755 | -0.00307 | 0.01297 | -0.00560 | 0.00055  | 0.00224  | 0.00036  |
| 13652 | 1887.84 | 124.4 | 3.51 | 0.30  | 0.0178 | 0.0620 | 25.86 | 1.691 | -2.017 | 3.1307 | -0.00461 | 0.04074 | -0.01580 | -0.00147 | 0.01301 | -0.00505 | 0.00215  | 0.00229  | 0.00091  |
| 13653 | 1886.69 | 124.7 | 3.50 | 0.30  | 0.0205 | 0.0589 | 25.99 | 1.691 | -1.898 | 3.1300 | -0.00355 | 0.03956 | -0.01453 | -0.00113 | 0.01264 | -0.00464 | 0.00249  | 0.00192  | 0.00132  |
| 13654 | 1889.42 | 123.4 | 3.52 | 0.31  | 0.0222 | 0.0560 | 26.11 | 1.692 | -1.786 | 3.1346 | -0.00417 | 0.03833 | -0.01530 | -0.00133 | 0.01223 | -0.00488 | 0.00229  | 0.00150  | 0.00108  |
| 13655 | 1888.56 | 123.4 | 3.51 | 0.32  | 0.0229 | 0.0573 | 26.24 | 1.692 | -1.663 | 3.1313 | -0.00271 | 0.03724 | -0.01158 | -0.00086 | 0.01189 | -0.00370 | 0.00276  | 0.00117  | 0.00226  |
| 13656 | 1887.84 | 124.3 | 3.51 | 0.31  | 0.0188 | 0.0598 | 26.36 | 1.692 | -1.531 | 3.1323 | -0.00864 | 0.03125 | -0.02030 | -0.00276 | 0.00998 | -0.00648 | 0.00086  | -0.00075 | -0.00052 |
| 13657 | 1886.69 | 124.4 | 3.50 | 0.31  | 0.0181 | 0.0529 | 26.49 | 1.692 | -1.406 | 3.1291 | -0.00825 | 0.03002 | -0.01849 | -0.00264 | 0.00959 | -0.00591 | 0.00099  | -0.00113 | 0.00005  |
| 13658 | 1889.28 | 123.5 | 3.52 | 0.31  | 0.0184 | 0.0577 | 26.61 | 1.692 | -1.277 | 3.1337 | -0.01223 | 0.03091 | -0.01962 | -0.00390 | 0.00986 | -0.00626 | -0.00028 | -0.00086 | -0.00030 |
| 13659 | 1888.70 | 123.8 | 3.51 | 0.31  | 0.0195 | 0.0601 | 26.74 | 1.692 | -1.158 | 3.1319 | -0.01282 | 0.03659 | -0.01728 | -0.00409 | 0.01168 | -0.00552 | -0.00047 | 0.00096  | 0.00045  |
| 13660 | 1887.41 | 124.6 | 3.50 | 0.31  | 0.0174 | 0.0553 | 26.86 | 1.692 | -1.027 | 3.1306 | -0.01041 | 0.04290 | -0.01551 | -0.00332 | 0.01370 | -0.00495 | 0.00030  | 0.00298  | 0.00101  |
| 13661 | 1886.83 | 124.5 | 3.50 | 0.31  | 0.0184 | 0.0596 | 26.99 | 1.692 | -0.904 | 3.1296 | -0.00606 | 0.04502 | -0.01134 | -0.00194 | 0.01439 | -0.00362 | 0.00168  | 0.00366  | 0.00234  |
| 13662 | 1889.42 | 123.4 | 3.52 | 0.31  | 0.0174 | 0.0589 | 27.11 | 1.691 | -0.774 | 3.1336 | -0.00293 | 0.04537 | -0.00967 | -0.00093 | 0.01448 | -0.00309 | 0.00269  | 0.00375  | 0.00287  |
| 13663 | 1888.27 | 123.8 | 3.51 | 0.33  | 0.0208 | 0.0581 | 27.24 | 1.693 | -0.670 | 3.1328 | -0.00134 | 0.04214 | -0.01111 | -0.00043 | 0.01345 | -0.00355 | 0.00319  | 0.00273  | 0.00242  |
| 13664 | 1889.28 | 123.4 | 3.52 | 0.31  | 0.0198 | 0.0603 | 27.36 | 1.692 | -0.532 | 3.1342 | -0.00157 | 0.03786 | -0.01237 | -0.00050 | 0.01208 | -0.00395 | 0.00312  | 0.00136  | 0.00201  |
| 13665 | 1888.56 | 124.0 | 3.51 | 0.32  | 0.0212 | 0.0564 | 27.49 | 1.692 | -0.413 | 3.1327 | -0.00561 | 0.03660 | -0.01493 | -0.00179 | 0.01168 | -0.00477 | 0.00183  | 0.00096  | 0.00119  |
| 13666 | 1886.98 | 124.6 | 3.50 | 0.32  | 0.0205 | 0.0589 | 27.61 | 1.693 | -0.292 | 3.1302 | -0.00713 | 0.03224 | -0.01937 | -0.00228 | 0.01030 | -0.00619 | 0.00134  | -0.00042 | -0.00023 |
| 13667 | 1886.54 | 124.2 | 3.50 | 0.32  | 0.0219 | 0.0512 | 27.74 | 1.693 | -0.167 | 3.1293 | -0.00909 | 0.03219 | -0.01940 | -0.00290 | 0.01029 | -0.00620 | 0.00072  | -0.00044 | -0.00024 |
| 13668 | 1889.14 | 123.4 | 3.52 | 0.32  | 0.0205 | 0.0532 |       |       |        |        |          |         |          |          |         |          |          |          |          |

Table A23. Continued.

Run = 202

M = 1.60

xsppos = 42.352

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c  | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|---------|----------|----------|
| 13688 | 1887.98 | 124.6 | 3.50 | 0.30  | 0.0229 | 0.0611 | 30.11 | 1.692 | 2.227  | 3.1310 | -0.00097 | 0.04384 | -0.01330 | -0.00031 | 0.01400 | -0.00425 | 0.00331 | 0.00328  | 0.00172  |
| 13689 | 1886.69 | 124.7 | 3.50 | 0.29  | 0.0222 | 0.0598 | 30.24 | 1.691 | 2.356  | 3.1293 | 0.00032  | 0.04403 | -0.01114 | 0.00010  | 0.01407 | -0.00356 | 0.00372 | 0.00335  | 0.00240  |
| 13690 | 1889.57 | 123.6 | 3.51 | 0.30  | 0.0201 | 0.0586 | 30.36 | 1.692 | 2.476  | 3.1340 | -0.00226 | 0.04319 | -0.00612 | -0.00072 | 0.01378 | -0.00195 | 0.00290 | 0.00306  | 0.00401  |
| 13691 | 1888.99 | 123.7 | 3.51 | 0.30  | 0.0253 | 0.0549 | 30.49 | 1.692 | 2.598  | 3.1324 | -0.00042 | 0.04477 | -0.00398 | -0.00013 | 0.01429 | -0.00127 | 0.00349 | 0.00357  | 0.00469  |
| 13692 | 1887.84 | 124.4 | 3.50 | 0.30  | 0.0219 | 0.0577 | 30.62 | 1.692 | 2.727  | 3.1308 | -0.00198 | 0.04355 | -0.00367 | -0.00063 | 0.01391 | -0.00117 | 0.00299 | 0.00319  | 0.00479  |
| 13693 | 1886.83 | 124.8 | 3.50 | 0.31  | 0.0209 | 0.0609 | 30.74 | 1.692 | 2.847  | 3.1299 | -0.00089 | 0.04225 | -0.00471 | -0.00028 | 0.01350 | -0.00150 | 0.00334 | 0.00277  | 0.00446  |
| 13694 | 1889.28 | 123.6 | 3.51 | 0.30  | 0.0225 | 0.0590 | 30.86 | 1.692 | 2.972  | 3.1333 | -0.00196 | 0.04410 | -0.00392 | -0.00062 | 0.01407 | -0.00125 | 0.00300 | 0.00335  | 0.00471  |
| 13695 | 1887.12 | 124.7 | 3.50 | 0.30  | 0.0212 | 0.0546 | 30.86 | 1.692 | 2.977  | 3.1302 | -0.00142 | 0.04273 | -0.00482 | -0.00045 | 0.01365 | -0.00154 | 0.00317 | 0.00293  | 0.00442  |
| 13696 | 1888.56 | 124.1 | 3.51 | 0.30  | 0.0243 | 0.0628 | 30.99 | 1.692 | 3.100  | 3.1347 | -0.00193 | 0.04180 | -0.00993 | -0.00062 | 0.01334 | -0.00317 | 0.00300 | 0.00261  | 0.00279  |
| 13697 | 1888.56 | 123.7 | 3.51 | 0.30  | 0.0222 | 0.0579 | 31.11 | 1.691 | 3.228  | 3.1333 | -0.00261 | 0.04414 | -0.00631 | -0.00083 | 0.01409 | -0.00201 | 0.00279 | 0.00336  | 0.00395  |
| 13698 | 1888.27 | 124.4 | 3.51 | 0.30  | 0.0232 | 0.0519 | 31.24 | 1.692 | 3.348  | 3.1324 | -0.00301 | 0.04545 | -0.00534 | -0.00096 | 0.01451 | -0.00170 | 0.00266 | 0.00379  | 0.00426  |
| 13699 | 1887.12 | 124.8 | 3.50 | 0.30  | 0.0229 | 0.0537 | 31.37 | 1.692 | 3.476  | 3.1294 | -0.00096 | 0.04670 | -0.00674 | -0.00031 | 0.01492 | -0.00215 | 0.00331 | 0.00420  | 0.00381  |
| 13700 | 1889.57 | 124.0 | 3.51 | 0.31  | 0.0260 | 0.0534 | 31.49 | 1.692 | 3.592  | 3.1330 | -0.00005 | 0.04462 | -0.00897 | -0.00002 | 0.01423 | -0.00286 | 0.00361 | 0.00351  | 0.00310  |
| 13701 | 1886.98 | 124.9 | 3.50 | 0.31  | 0.0243 | 0.0544 | 31.61 | 1.692 | 3.720  | 3.1288 | 0.00118  | 0.04717 | -0.00651 | 0.00038  | 0.01508 | -0.00208 | 0.00400 | 0.00435  | 0.00388  |
| 13702 | 1888.13 | 124.1 | 3.51 | 0.31  | 0.0236 | 0.0596 | 31.74 | 1.692 | 3.846  | 3.1328 | 0.00135  | 0.04628 | -0.00603 | 0.00043  | 0.01477 | -0.00192 | 0.00405 | 0.00405  | 0.00404  |
| 13703 | 1889.14 | 123.6 | 3.51 | 0.30  | 0.0266 | 0.0650 | 31.86 | 1.692 | 3.972  | 3.1333 | 0.00058  | 0.04550 | -0.00848 | 0.00018  | 0.01452 | -0.00271 | 0.00381 | 0.00380  | 0.00326  |
| 13704 | 1889.86 | 123.7 | 3.51 | 0.30  | 0.0242 | 0.0636 | 31.99 | 1.692 | 4.101  | 3.1347 | 0.00087  | 0.04322 | -0.00719 | 0.00028  | 0.01379 | -0.00229 | 0.00390 | 0.00306  | 0.00367  |
| 13705 | 1888.70 | 123.9 | 3.51 | 0.29  | 0.0249 | 0.0585 | 32.11 | 1.691 | 4.230  | 3.1326 | 0.00054  | 0.04387 | -0.00786 | 0.00017  | 0.01401 | -0.00251 | 0.00379 | 0.00328  | 0.00345  |
| 13706 | 1887.70 | 124.9 | 3.50 | 0.31  | 0.0270 | 0.0522 | 32.24 | 1.692 | 4.341  | 3.1307 | -0.00201 | 0.04557 | -0.00455 | -0.00064 | 0.01456 | -0.00145 | 0.00298 | 0.00383  | 0.00451  |
| 13707 | 1886.69 | 125.1 | 3.50 | 0.29  | 0.0257 | 0.0440 | 32.37 | 1.691 | 4.484  | 3.1290 | -0.00279 | 0.04683 | -0.00505 | -0.00089 | 0.01497 | -0.00162 | 0.00273 | 0.00424  | 0.00435  |
| 13708 | 1889.14 | 123.8 | 3.51 | 0.29  | 0.0267 | 0.0445 | 32.49 | 1.691 | 4.605  | 3.1340 | 0.00077  | 0.04861 | -0.00529 | 0.00024  | 0.01551 | -0.00169 | 0.00387 | 0.00479  | 0.00427  |
| 13709 | 1889.28 | 123.3 | 3.52 | 0.31  | 0.0239 | 0.0532 | 32.61 | 1.692 | 4.720  | 3.1331 | 0.00235  | 0.05042 | -0.00488 | 0.00075  | 0.01609 | -0.00156 | 0.00437 | 0.00537  | 0.00440  |
| 13710 | 1888.27 | 123.9 | 3.51 | 0.29  | 0.0267 | 0.0538 | 32.74 | 1.691 | 4.854  | 3.1323 | 0.00416  | 0.04857 | -0.00527 | 0.00133  | 0.01551 | -0.00168 | 0.00495 | 0.00478  | 0.00428  |
| 13711 | 1887.12 | 124.7 | 3.50 | 0.30  | 0.0253 | 0.0587 | 32.86 | 1.692 | 4.976  | 3.1299 | 0.00540  | 0.04926 | -0.00556 | 0.00172  | 0.01574 | -0.00178 | 0.00535 | 0.00502  | 0.00419  |
| 13712 | 1886.40 | 124.5 | 3.50 | 0.30  | 0.0243 | 0.0554 | 32.99 | 1.692 | 5.099  | 3.1308 | 0.00302  | 0.04359 | -0.00729 | 0.00096  | 0.01392 | -0.00233 | 0.00459 | 0.00320  | 0.00363  |
| 13713 | 1889.42 | 123.4 | 3.52 | 0.31  | 0.0267 | 0.0482 | 33.11 | 1.692 | 5.217  | 3.1336 | 0.00223  | 0.04635 | -0.00250 | 0.00071  | 0.01479 | -0.00080 | 0.00433 | 0.00407  | 0.00516  |
| 13714 | 1888.42 | 124.0 | 3.51 | 0.32  | 0.0308 | 0.0403 | 33.24 | 1.693 | 5.329  | 3.1322 | 0.00216  | 0.04557 | -0.00452 | 0.00069  | 0.01455 | -0.00144 | 0.00431 | 0.00382  | 0.00452  |
| 13715 | 1887.26 | 124.6 | 3.50 | 0.30  | 0.0250 | 0.0501 | 33.36 | 1.691 | 5.478  | 3.1301 | 0.00174  | 0.04577 | -0.00477 | 0.00056  | 0.01462 | -0.00152 | 0.00418 | 0.00390  | 0.00444  |
| 13716 | 1887.41 | 124.1 | 3.51 | 0.29  | 0.0260 | 0.0526 | 33.49 | 1.691 | 5.604  | 3.1317 | 0.00099  | 0.04411 | -0.00517 | 0.00032  | 0.01409 | -0.00165 | 0.00394 | 0.00336  | 0.00431  |
| 13717 | 1888.42 | 123.5 | 3.51 | 0.28  | 0.0236 | 0.0521 | 33.61 | 1.691 | 5.738  | 3.1323 | -0.00047 | 0.04399 | -0.00230 | -0.00015 | 0.01404 | -0.00074 | 0.00347 | 0.00332  | 0.00523  |
| 13718 | 1889.28 | 123.4 | 3.52 | 0.29  | 0.0256 | 0.0579 | 33.74 | 1.691 | 5.855  | 3.1334 | 0.00201  | 0.04557 | -0.00123 | 0.00064  | 0.01454 | -0.00039 | 0.00426 | 0.00382  | 0.00557  |
| 13719 | 1888.56 | 123.8 | 3.51 | 0.27  | 0.0219 | 0.0568 | 33.86 | 1.690 | 6.001  | 3.1324 | 0.00053  | 0.04668 | 0.00095  | 0.00017  | 0.01490 | 0.00030  | 0.00379 | 0.00418  | 0.00626  |
| 13720 | 1887.55 | 124.7 | 3.50 | 0.28  | 0.0257 | 0.0561 | 33.99 | 1.691 | 6.113  | 3.1304 | 0.00051  | 0.04883 | -0.00186 | 0.00016  | 0.01560 | -0.00059 | 0.00378 | 0.00488  | 0.00537  |
| 13721 | 1886.83 | 124.5 | 3.50 | 0.28  | 0.0215 | 0.0566 | 34.11 | 1.691 | 6.241  | 3.1292 | 0.00411  | 0.04944 | 0.00002  | 0.00131  | 0.01580 | 0.00001  | 0.00493 | 0.00508  | 0.00597  |
| 13722 | 1889.28 | 123.5 | 3.51 | 0.28  | 0.0236 | 0.0530 | 34.24 | 1.691 | 6.366  | 3.1339 | 0.00336  | 0.04940 | -0.00173 | 0.00107  | 0.01576 | -0.00055 | 0.00469 | 0.00504  | 0.00541  |
| 13723 | 1888.13 | 124.0 | 3.51 | 0.28  | 0.0243 | 0.0535 | 34.36 | 1.691 | 6.488  | 3.1318 | 0.00465  | 0.05088 | -0.00366 | 0.00149  | 0.01625 | -0.00117 | 0.00511 | 0.00552  | 0.00479  |
| 13724 | 1887.41 | 124.8 | 3.50 | 0.29  | 0.0226 | 0.0591 | 34.49 | 1.691 | 6.606  | 3.1312 | 0.00488  | 0.05126 | -0.00398 | 0.00156  | 0.01637 | -0.00127 | 0.00518 | 0.00565  | 0.00469  |
| 13725 | 1886.26 | 124.6 | 3.50 | 0.29  | 0.0209 | 0.0637 | 34.61 | 1.691 | 6.734  | 3.1294 | 0.00496  | 0.05104 | -0.00321 | 0.00158  | 0.01631 | -0.00102 | 0.00521 | 0.00559  | 0.00494  |
| 13726 | 1889.42 | 123.6 | 3.51 | 0.29  | 0.0201 | 0.0679 | 34.74 | 1.691 | 6.862  | 3.1337 | 0.00552  | 0.05311 | -0.00081 | 0.00176  | 0.01695 | -0.00026 | 0.00538 | 0.00622  | 0.00570  |
| 13727 | 1888.42 | 124.3 | 3.51 | 0.28  | 0.0222 | 0.0616 | 34.86 | 1.691 | 6.990  | 3.1325 | 0.00705  | 0.05116 | -0.00414 | 0.00225  | 0.01633 | -0.00132 | 0.00587 | 0.00561  | 0.00464  |
| 13728 | 1887.55 | 124.9 | 3.50 | 0.28  | 0.0198 | 0.0641 | 34.99 | 1.691 | 7.118  | 3.1321 | 0.00625  | 0.04945 | -0.00306 | 0.00200  | 0.01579 | -0.00098 | 0.00562 | 0.00506  | 0.00499  |
| 13729 | 1886.40 | 124.5 | 3.50 | 0.28  | 0.0174 | 0.0637 | 35.11 | 1.690 | 7.245  | 3.1297 | 0.00551  | 0.05001 | -0.00188 | 0.00176  | 0.01598 | -0.00060 | 0.00538 | 0.00526  | 0.00536  |
| 13730 | 1888.85 | 123.4 | 3.51 | 0.28  | 0.0191 | 0.0580 | 35.24 | 1.690 | 7.375  | 3.1327 | 0.00698  | 0.05260 | 0.00163  | 0.00223  | 0.01679 | 0.00052  | 0.00585 | 0.00607  | 0.00648  |
| 13731 | 1887.98 | 124.2 | 3.51 | 0.28  | 0.0157 | 0.0636 | 35.36 | 1.690 | 7.498  | 3.1303 | 0.00591  | 0.05189 | 0.00310  | 0.00189  | 0.01658 | 0.00099  | 0.00551 | 0.00585  | 0.00695  |
| 13732 | 1886.83 | 124.7 | 3.50 | 0.28  | 0.0157 | 0.0655 | 35.49 | 1.690 | 7.627  | 3.1301 | 0.00585  | 0.04790 | 0.00176  | 0.00187  | 0.01530 | 0.00056  | 0.00549 | 0.00458  | 0.00653  |
| 13733 | 1888.99 | 123.9 | 3.51 | 0.27  | 0.0177 | 0.0629 | 35.61 | 1.690 | 7.748  | 3.1336 | 0.00545  | 0.04663 | 0.00070  | 0.00174  | 0.01488 | 0.00022  | 0.00536 | 0.00416  | 0.00618  |
| 13734 | 1888.42 | 123.9 | 3.51 | 0.27  | 0.0150 | 0.0688 | 35.74 | 1.690 | 7.878  | 3.1325 | 0.00483  | 0.04213 | -0.00130 | 0.00154  | 0.01345 | -0.00041 | 0.00516 | 0.00272  | 0.00555  |
| 13735 | 1887.12 | 124.9 | 3.50 | 0.28  | 0.0171 | 0.0672 | 35.86 | 1.690 | 7.995  | 3.1305 | 0.00079  | 0.04002 | 0.00021  | 0.00025  | 0.01278 | 0.00007  | 0.00387 | 0.00206  | 0.00603  |
| 13736 | 1889.14 | 123.8 | 3.51 | 0.28  | 0.0146 | 0.0695 | 35.99 | 1.690 | 8.122  | 3.1335 | -0.00150 | 0.03829 | 0.00248  | -0.00048 | 0.01222 | 0.00079  | 0.00314 | 0.00150  | 0.00675  |
| 13737 | 1889.14 | 123.8 | 3.51 | 0.28  | 0.0167 | 0.0679 | 36.11 | 1.690 | 8.248  | 3.1333 | -0.00305 | 0.03685 | -0.00004 | -0.00097 | 0.01176 | -0.00001 | 0.00265 | 0.00104  | 0.00595  |
| 13738 | 1888.27 | 124.6 | 3.50 | 0.30  | 0.0184 | 0.0717 | 36.24 | 1.691 | 8.358  | 3.1325 | -0.00479 | 0.03631 | 0.00109  | -0.00153 | 0.01159 | 0.00035  | 0.00209 | 0.00087  | 0.00631  |
| 13739 | 1886.98 | 124.9 | 3.50 | 0.28  | 0.0143 | 0.0685 | 36.37 | 1.690 | 8.501  | 3.1298 | -0.00817 | 0.03362 | -0.01975 | -0.00261 | 0.01074 | -0.00631 | 0.00101 | 0.00002  | -0.00035 |
| 13740 | 1886.54 | 124.4 | 3.50 | 0.30  | 0.0160 | 0.0704 | 36.49 | 1.691 | 8.611  | 3.1301 | -0.00985 | 0.03013 | -0.02034 | -0.00315 | 0.00962 | -0.00650 | 0.00048 | -0.00110 | -0.00054 |
| 13746 | 1889.28 | 123.6 | 3.51 | 0.29  | 0.0181 | 0.0733 |       |       |        |        |          |         |          |          |         |          |         |          |          |

Table A23. Concluded.

Run = 202

M = 1.60

xsppos = 42.349

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 13766 | 1888.85 | 123.9 | 3.51 | 0.29  | 0.0260 | 0.0497 | 39.11 | 1.691 | 11.230 | 3.1344 | -0.02588 | 0.01316 | -0.06092 | -0.00826 | 0.00420 | -0.01944 | -0.00463 | -0.00652 | -0.01348 |
| 13767 | 1888.70 | 123.5 | 3.51 | 0.29  | 0.0246 | 0.0573 | 39.24 | 1.691 | 11.355 | 3.1328 | -0.02246 | 0.01805 | -0.06080 | -0.00717 | 0.00576 | -0.01941 | -0.00355 | -0.00496 | -0.01344 |
| 13768 | 1888.56 | 123.9 | 3.51 | 0.28  | 0.0239 | 0.0635 | 39.36 | 1.691 | 11.488 | 3.1322 | -0.02116 | 0.01939 | -0.06209 | -0.00676 | 0.00619 | -0.01982 | -0.00313 | -0.00453 | -0.01386 |
| 13769 | 1887.26 | 124.5 | 3.50 | 0.30  | 0.0281 | 0.0518 | 39.49 | 1.692 | 11.595 | 3.1303 | -0.01852 | 0.02048 | -0.06222 | -0.00592 | 0.00654 | -0.01988 | -0.00229 | -0.00418 | -0.01392 |
| 13770 | 1887.41 | 124.1 | 3.51 | 0.29  | 0.0260 | 0.0600 | 39.61 | 1.691 | 11.729 | 3.1317 | -0.01509 | 0.02336 | -0.06205 | -0.00482 | 0.00746 | -0.01981 | -0.00120 | -0.00326 | -0.01385 |
| 13771 | 1888.42 | 123.6 | 3.51 | 0.28  | 0.0267 | 0.0604 | 39.74 | 1.691 | 11.862 | 3.1325 | -0.01503 | 0.02712 | -0.06007 | -0.00480 | 0.00866 | -0.01918 | -0.00118 | -0.00207 | -0.01322 |
| 13772 | 1888.42 | 124.4 | 3.51 | 0.28  | 0.0253 | 0.0512 | 39.86 | 1.691 | 11.989 | 3.1321 | -0.01382 | 0.03174 | -0.05705 | -0.00441 | 0.01013 | -0.01821 | -0.00079 | -0.00059 | -0.01225 |
| 13773 | 1887.26 | 124.8 | 3.50 | 0.28  | 0.0287 | 0.0550 | 39.99 | 1.691 | 12.108 | 3.1304 | -0.01361 | 0.03275 | -0.05595 | -0.00435 | 0.01046 | -0.01787 | -0.00072 | -0.00026 | -0.01191 |
| 13774 | 1887.70 | 124.1 | 3.51 | 0.29  | 0.0281 | 0.0565 | 40.11 | 1.691 | 12.228 | 3.1326 | -0.01246 | 0.03253 | -0.05431 | -0.00398 | 0.01038 | -0.01734 | -0.00036 | -0.00034 | -0.01138 |
| 13775 | 1888.56 | 123.5 | 3.51 | 0.30  | 0.0263 | 0.0611 | 40.24 | 1.692 | 12.350 | 3.1320 | -0.01103 | 0.03259 | -0.04825 | -0.00352 | 0.01041 | -0.01541 | 0.00010  | -0.00032 | -0.00944 |
| 13776 | 1888.13 | 124.3 | 3.51 | 0.29  | 0.0239 | 0.0654 | 40.36 | 1.691 | 12.484 | 3.1318 | -0.01178 | 0.03180 | -0.05106 | -0.00376 | 0.01015 | -0.01630 | -0.00014 | -0.00057 | -0.01034 |
| 13777 | 1889.42 | 123.8 | 3.51 | 0.29  | 0.0239 | 0.0644 | 40.49 | 1.691 | 12.605 | 3.1340 | -0.01030 | 0.02943 | -0.04951 | -0.00329 | 0.00939 | -0.01580 | 0.00034  | -0.00133 | -0.00984 |
| 13778 | 1888.70 | 123.7 | 3.51 | 0.28  | 0.0232 | 0.0659 | 40.61 | 1.691 | 12.739 | 3.1333 | -0.01126 | 0.02788 | -0.05041 | -0.00359 | 0.00890 | -0.01609 | 0.00003  | -0.00182 | -0.01013 |
| 13779 | 1887.70 | 124.3 | 3.51 | 0.28  | 0.0253 | 0.0596 | 40.74 | 1.691 | 12.860 | 3.1320 | -0.01288 | 0.02613 | -0.05022 | -0.00411 | 0.00834 | -0.01603 | -0.00049 | -0.00238 | -0.01007 |
| 13780 | 1886.98 | 124.6 | 3.50 | 0.29  | 0.0250 | 0.0632 | 40.86 | 1.691 | 12.983 | 3.1296 | -0.01158 | 0.02738 | -0.04859 | -0.00370 | 0.00875 | -0.01552 | -0.00008 | -0.00198 | -0.00956 |
| 13781 | 1889.14 | 123.9 | 3.51 | 0.28  | 0.0260 | 0.0572 | 40.99 | 1.691 | 13.113 | 3.1345 | -0.01636 | 0.02321 | -0.04864 | -0.00522 | 0.00740 | -0.01552 | -0.00160 | -0.00332 | -0.00956 |
| 13782 | 1888.56 | 123.8 | 3.51 | 0.28  | 0.0232 | 0.0603 | 41.11 | 1.691 | 13.238 | 3.1332 | -0.01788 | 0.02234 | -0.04770 | -0.00571 | 0.00713 | -0.01523 | -0.00208 | -0.00359 | -0.00926 |
| 13783 | 1887.84 | 124.5 | 3.50 | 0.29  | 0.0260 | 0.0591 | 41.24 | 1.691 | 13.356 | 3.1310 | -0.01622 | 0.02193 | -0.04586 | -0.00518 | 0.00700 | -0.01465 | -0.00156 | -0.00372 | -0.00869 |
| 13784 | 1886.98 | 124.8 | 3.50 | 0.28  | 0.0274 | 0.0589 | 41.36 | 1.691 | 13.489 | 3.1307 | -0.01700 | 0.02116 | -0.04928 | -0.00558 | 0.00676 | -0.01574 | -0.00196 | -0.00397 | -0.00978 |
| 13785 | 1889.28 | 123.9 | 3.51 | 0.28  | 0.0246 | 0.0583 | 41.49 | 1.691 | 13.612 | 3.1334 | -0.01812 | 0.02690 | -0.04630 | -0.00578 | 0.00859 | -0.01478 | -0.00216 | -0.00214 | -0.00882 |
| 13786 | 1888.42 | 123.9 | 3.51 | 0.27  | 0.0239 | 0.0635 | 41.61 | 1.690 | 13.744 | 3.1313 | -0.01427 | 0.03052 | -0.04387 | -0.00456 | 0.00975 | -0.01401 | -0.00093 | -0.00098 | -0.00805 |
| 13787 | 1887.98 | 124.8 | 3.50 | 0.28  | 0.0250 | 0.0576 | 41.74 | 1.691 | 13.862 | 3.1318 | -0.01188 | 0.03227 | -0.04630 | -0.00379 | 0.01030 | -0.01478 | -0.00017 | -0.00042 | -0.00882 |
| 13788 | 1887.12 | 124.7 | 3.50 | 0.29  | 0.0270 | 0.0578 | 41.86 | 1.691 | 13.982 | 3.1299 | -0.01047 | 0.03169 | -0.04568 | -0.00335 | 0.01013 | -0.01459 | 0.00028  | -0.00060 | -0.00863 |
| 13789 | 1886.69 | 124.3 | 3.50 | 0.29  | 0.0253 | 0.0578 | 41.99 | 1.691 | 14.106 | 3.1299 | -0.00931 | 0.03114 | -0.04627 | -0.00298 | 0.00995 | -0.01478 | 0.00065  | -0.00077 | -0.00882 |
| 13790 | 1888.56 | 123.8 | 3.51 | 0.30  | 0.0253 | 0.0540 | 42.11 | 1.691 | 14.225 | 3.1329 | -0.01273 | 0.02648 | -0.04667 | -0.00406 | 0.00845 | -0.01490 | -0.00044 | -0.00227 | -0.00894 |
| 13791 | 1887.84 | 124.5 | 3.50 | 0.29  | 0.0232 | 0.0566 | 42.24 | 1.691 | 14.354 | 3.1308 | -0.01343 | 0.02617 | -0.04785 | -0.00429 | 0.00836 | -0.01528 | -0.00067 | -0.00237 | -0.00932 |
| 13792 | 1887.26 | 124.9 | 3.50 | 0.29  | 0.0226 | 0.0516 | 42.36 | 1.691 | 14.481 | 3.1298 | -0.01703 | 0.02459 | -0.04833 | -0.00544 | 0.00786 | -0.01544 | -0.00182 | -0.00287 | -0.00948 |
| 13793 | 1889.28 | 123.9 | 3.51 | 0.29  | 0.0246 | 0.0527 | 42.49 | 1.691 | 14.602 | 3.1350 | -0.01799 | 0.02415 | -0.05083 | -0.00574 | 0.00770 | -0.01621 | -0.00212 | -0.00302 | -0.01025 |
| 13794 | 1888.85 | 123.6 | 3.51 | 0.30  | 0.0239 | 0.0551 | 42.61 | 1.691 | 14.726 | 3.1327 | -0.01685 | 0.03218 | -0.04780 | -0.00538 | 0.01027 | -0.01526 | -0.00176 | -0.00045 | -0.00930 |
| 13795 | 1887.98 | 124.2 | 3.51 | 0.29  | 0.0260 | 0.0525 | 42.74 | 1.691 | 14.856 | 3.1327 | -0.01420 | 0.03335 | -0.04583 | -0.00453 | 0.01065 | -0.01463 | -0.00091 | -0.00008 | -0.00867 |
| 13796 | 1888.70 | 123.8 | 3.51 | 0.28  | 0.0239 | 0.0598 | 42.86 | 1.691 | 14.990 | 3.1323 | -0.00847 | 0.03686 | -0.04214 | -0.00270 | 0.01177 | -0.01345 | 0.00092  | 0.00104  | -0.00749 |
| 13797 | 1888.13 | 124.4 | 3.51 | 0.29  | 0.0243 | 0.0581 | 42.99 | 1.691 | 15.110 | 3.1318 | -0.00737 | 0.03642 | -0.04134 | -0.00235 | 0.01163 | -0.01320 | 0.00127  | 0.00091  | -0.00724 |
| 13798 | 1886.98 | 124.9 | 3.50 | 0.28  | 0.0239 | 0.0626 | 43.12 | 1.691 | 15.240 | 3.1312 | -0.00744 | 0.03525 | -0.04386 | -0.00238 | 0.01126 | -0.01401 | 0.00125  | 0.00053  | -0.00805 |
| 13799 | 1888.85 | 124.0 | 3.51 | 0.27  | 0.0249 | 0.0575 | 43.24 | 1.690 | 15.367 | 3.1336 | -0.00758 | 0.03600 | -0.04758 | -0.00242 | 0.01149 | -0.01518 | 0.00120  | 0.00076  | -0.00922 |
| 13800 | 1888.56 | 123.7 | 3.51 | 0.27  | 0.0236 | 0.0559 | 43.36 | 1.690 | 15.497 | 3.1316 | -0.00686 | 0.03644 | -0.04752 | -0.00219 | 0.01164 | -0.01517 | 0.00143  | 0.00091  | -0.00921 |
| 13801 | 1887.98 | 124.4 | 3.51 | 0.28  | 0.0263 | 0.0537 | 43.49 | 1.691 | 15.614 | 3.1311 | -0.00778 | 0.03577 | -0.04923 | -0.00248 | 0.01142 | -0.01572 | 0.00114  | 0.00070  | -0.00976 |
| 13802 | 1887.12 | 124.9 | 3.50 | 0.28  | 0.0257 | 0.0524 | 43.61 | 1.691 | 15.734 | 3.1313 | -0.00801 | 0.03261 | -0.04976 | -0.00256 | 0.01041 | -0.01589 | 0.00106  | -0.00031 | -0.00993 |
| 13803 | 1887.98 | 124.2 | 3.51 | 0.29  | 0.0208 | 0.0581 | 43.74 | 1.691 | 15.863 | 3.1324 | -0.00900 | 0.03422 | -0.04412 | -0.00287 | 0.01092 | -0.01408 | 0.00075  | 0.00020  | -0.00812 |
| 13804 | 1888.99 | 123.7 | 3.51 | 0.28  | 0.0201 | 0.0642 | 43.86 | 1.690 | 15.991 | 3.1339 | -0.00951 | 0.03304 | -0.04408 | -0.00304 | 0.01054 | -0.01407 | 0.00059  | -0.00018 | -0.00810 |
| 13805 | 1888.27 | 124.4 | 3.51 | 0.28  | 0.0229 | 0.0601 | 43.99 | 1.691 | 16.113 | 3.1319 | -0.01081 | 0.03436 | -0.04022 | -0.00345 | 0.01097 | -0.01284 | 0.00017  | 0.00025  | -0.00688 |
| 13806 | 1887.12 | 124.6 | 3.50 | 0.29  | 0.0236 | 0.0606 | 44.12 | 1.691 | 16.237 | 3.1295 | -0.00926 | 0.03382 | -0.03684 | -0.00296 | 0.01081 | -0.01177 | 0.00066  | 0.00008  | -0.00581 |
| 13807 | 1888.85 | 123.9 | 3.51 | 0.28  | 0.0229 | 0.0592 | 44.24 | 1.691 | 16.363 | 3.1343 | -0.01158 | 0.03246 | -0.03724 | -0.00369 | 0.01036 | -0.01188 | -0.00007 | -0.00037 | -0.00592 |
| 13808 | 1887.12 | 124.8 | 3.50 | 0.29  | 0.0233 | 0.0594 | 44.36 | 1.691 | 16.481 | 3.1313 | -0.01208 | 0.03164 | -0.03891 | -0.00386 | 0.01010 | -0.01243 | -0.00024 | -0.00062 | -0.00647 |
| 13809 | 1887.12 | 124.3 | 3.50 | 0.29  | 0.0270 | 0.0578 | 44.49 | 1.691 | 16.604 | 3.1306 | -0.00887 | 0.03346 | -0.03742 | -0.00283 | 0.01069 | -0.01195 | 0.00079  | -0.00004 | -0.00599 |
| 13810 | 1888.56 | 123.6 | 3.51 | 0.29  | 0.0208 | 0.0618 | 44.61 | 1.691 | 16.734 | 3.1321 | -0.01036 | 0.03368 | -0.03707 | -0.00331 | 0.01075 | -0.01184 | 0.00031  | 0.00003  | -0.00587 |
| 13811 | 1887.98 | 124.3 | 3.51 | 0.31  | 0.0239 | 0.0579 | 44.74 | 1.692 | 16.847 | 3.1317 | -0.00958 | 0.03312 | -0.03886 | -0.00306 | 0.01058 | -0.01241 | 0.00056  | -0.00015 | -0.00645 |
| 13812 | 1887.12 | 124.7 | 3.50 | 0.29  | 0.0215 | 0.0557 | 44.86 | 1.691 | 16.983 | 3.1301 | -0.01016 | 0.03350 | -0.03868 | -0.00325 | 0.01070 | -0.01236 | 0.00038  | -0.00002 | -0.00640 |
| 13813 | 1887.55 | 124.6 | 3.50 | 0.29  | 0.0215 | 0.0585 | 44.99 | 1.691 | 17.113 | 3.1317 | -0.01144 | 0.03266 | -0.03982 | -0.00365 | 0.01043 | -0.01271 | -0.00003 | -0.00030 | -0.00675 |
| 13814 | 1886.98 | 124.8 | 3.50 | 0.28  | 0.0219 | 0.0540 | 45.11 | 1.691 | 17.241 | 3.1303 | -0.00968 | 0.03365 | -0.04006 | -0.00309 | 0.01075 | -0.01280 | 0.00053  | 0.00003  | -0.00684 |
| 13815 | 1888.70 | 123.6 | 3.51 | 0.29  | 0.0226 | 0.0553 | 45.24 | 1.691 | 17.361 | 3.1326 | -0.01051 | 0.03407 | -0.03841 | -0.00336 | 0.01088 | -0.01226 | 0.00027  | 0.00015  | -0.00630 |
| 13816 | 1887.84 | 124.3 | 3.51 | 0.29  | 0.0226 | 0.0507 | 45.36 | 1.691 | 17.481 | 3.1313 | -0.01044 | 0.03415 | -0.03921 | -0.00333 | 0.01091 | -0.01252 | 0.00029  | 0.00018  | -0.00656 |
| 13817 | 1887.26 | 124.6 | 3.50 | 0.29  | 0.0215 | 0.0566 | 45.49 | 1.691 | 17.610 | 3.1308 | -0.01059 | 0.03370 | -0.03865 | -0.00338 | 0.01076 | -0.01234 | 0.00024  | 0.00004  | -0.00638 |
| 13818 | 1888.99 | 123.8 | 3.51 | 0.29  | 0.0201 | 0.0595 | 45.61 | 1.691 | 17.737 | 3.1332 | -0.01087 | 0.03437 | -0.03805 | -0.00347 | 0.01097 | -0.01215 | 0.00015  | 0.00025  | -0.00618 |

Table A24. Run 203.

Run = 203  
M = 1.60  
xsp05 = 42.352

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 13819 | 1887.98 | 124.9 | 3.50 | 0.28  | 0.0226 | 0.0525 | 21.36 | 1.691 | -6.508 | 3.1321 | -0.01137 | 0.03333 | -0.04169 | -0.00363 | 0.01064 | -0.01331 | -0.00006 | -0.00002 | -0.00014 |
| 13820 | 1886.83 | 125.2 | 3.50 | 0.29  | 0.0205 | 0.0495 | 21.49 | 1.691 | -6.385 | 3.1303 | -0.01075 | 0.03330 | -0.04004 | -0.00343 | 0.01064 | -0.01279 | 0.00013  | -0.00002 | 0.00038  |
| 13821 | 1888.42 | 124.1 | 3.51 | 0.29  | 0.0246 | 0.0480 | 21.61 | 1.691 | -6.269 | 3.1323 | -0.01073 | 0.03382 | -0.04058 | -0.00342 | 0.01080 | -0.01296 | 0.00014  | 0.00014  | 0.00021  |
| 13822 | 1887.26 | 124.6 | 3.50 | 0.29  | 0.0226 | 0.0497 | 21.74 | 1.691 | -6.139 | 3.1308 | -0.01154 | 0.03395 | -0.04217 | -0.00368 | 0.01084 | -0.01347 | -0.00012 | 0.00018  | -0.00030 |
| 13823 | 1887.55 | 124.1 | 3.51 | 0.28  | 0.0181 | 0.0473 | 21.86 | 1.690 | -6.000 | 3.1328 | -0.01149 | 0.03254 | -0.04168 | -0.00367 | 0.01039 | -0.01330 | -0.00010 | -0.00028 | -0.00014 |
| 13824 | 1888.56 | 123.8 | 3.51 | 0.29  | 0.0229 | 0.0434 | 21.99 | 1.691 | -5.890 | 3.1325 | -0.00988 | 0.03327 | -0.04089 | -0.00316 | 0.01062 | -0.01305 | 0.00041  | -0.00004 | 0.00011  |
| 13825 | 1888.13 | 124.6 | 3.50 | 0.29  | 0.0233 | 0.0482 | 22.11 | 1.691 | -5.765 | 3.1314 | -0.00886 | 0.03486 | -0.03998 | -0.00283 | 0.01113 | -0.01277 | 0.00074  | 0.00047  | 0.00040  |
| 13826 | 1886.83 | 125.0 | 3.50 | 0.29  | 0.0250 | 0.0455 | 22.24 | 1.691 | -5.641 | 3.1304 | -0.00950 | 0.03362 | -0.04009 | -0.00304 | 0.01074 | -0.01281 | 0.00053  | 0.00008  | 0.00036  |
| 13827 | 1888.27 | 124.1 | 3.51 | 0.30  | 0.0222 | 0.0542 | 22.36 | 1.691 | -5.520 | 3.1329 | -0.01005 | 0.03331 | -0.04017 | -0.00321 | 0.01063 | -0.01282 | 0.00036  | -0.00003 | 0.00034  |
| 13828 | 1888.42 | 124.1 | 3.51 | 0.28  | 0.0212 | 0.0527 | 22.49 | 1.691 | -5.382 | 3.1317 | -0.00968 | 0.03477 | -0.04082 | -0.00309 | 0.01110 | -0.01303 | 0.00048  | 0.00044  | 0.00013  |
| 13829 | 1887.26 | 124.8 | 3.50 | 0.30  | 0.0226 | 0.0581 | 22.62 | 1.691 | -5.271 | 3.1314 | -0.01049 | 0.03218 | -0.04309 | -0.00335 | 0.01028 | -0.01376 | 0.00022  | -0.00039 | -0.00059 |
| 13830 | 1888.56 | 124.1 | 3.51 | 0.30  | 0.0212 | 0.0629 | 22.74 | 1.691 | -5.141 | 3.1324 | -0.00887 | 0.03430 | -0.04056 | -0.00283 | 0.01095 | -0.01295 | 0.00074  | 0.00029  | 0.00022  |
| 13831 | 1887.41 | 124.7 | 3.50 | 0.29  | 0.0215 | 0.0631 | 22.87 | 1.691 | -5.016 | 3.1300 | -0.00901 | 0.03418 | -0.04077 | -0.00288 | 0.01092 | -0.01303 | 0.00069  | 0.00026  | 0.00014  |
| 13832 | 1886.54 | 124.3 | 3.50 | 0.30  | 0.0233 | 0.0613 | 22.99 | 1.691 | -4.898 | 3.1299 | -0.00969 | 0.03413 | -0.04123 | -0.00309 | 0.01091 | -0.01317 | 0.00047  | 0.00024  | -0.00001 |
| 13833 | 1889.14 | 123.6 | 3.51 | 0.29  | 0.0232 | 0.0705 | 23.11 | 1.691 | -4.766 | 3.1329 | -0.00833 | 0.03468 | -0.04197 | -0.00266 | 0.01107 | -0.01340 | 0.00091  | 0.00041  | -0.00023 |
| 13834 | 1888.13 | 124.6 | 3.51 | 0.29  | 0.0212 | 0.0685 | 23.24 | 1.691 | -4.635 | 3.1320 | -0.01040 | 0.03448 | -0.04120 | -0.00332 | 0.01101 | -0.01315 | 0.00025  | 0.00035  | 0.00001  |
| 13835 | 1887.26 | 125.0 | 3.50 | 0.30  | 0.0219 | 0.0671 | 23.36 | 1.691 | -4.521 | 3.1317 | -0.01092 | 0.03286 | -0.04295 | -0.00349 | 0.01049 | -0.01372 | 0.00008  | -0.00017 | -0.00055 |
| 13836 | 1886.83 | 124.3 | 3.50 | 0.30  | 0.0198 | 0.0650 | 23.49 | 1.691 | -4.399 | 3.1301 | -0.01068 | 0.03477 | -0.04074 | -0.00341 | 0.01111 | -0.01302 | 0.00016  | 0.00045  | 0.00015  |
| 13837 | 1888.99 | 123.5 | 3.51 | 0.29  | 0.0222 | 0.0607 | 23.61 | 1.691 | -4.268 | 3.1340 | -0.01104 | 0.03309 | -0.04232 | -0.00352 | 0.01056 | -0.01350 | 0.00004  | -0.00010 | -0.00034 |
| 13838 | 1888.27 | 124.0 | 3.51 | 0.30  | 0.0222 | 0.0532 | 23.74 | 1.691 | -4.146 | 3.1321 | -0.00991 | 0.03403 | -0.04060 | -0.00316 | 0.01087 | -0.01296 | 0.00040  | 0.00020  | 0.00020  |
| 13839 | 1887.55 | 124.7 | 3.50 | 0.29  | 0.0257 | 0.0486 | 23.86 | 1.691 | -4.016 | 3.1303 | -0.00806 | 0.03447 | -0.04062 | -0.00257 | 0.01101 | -0.01298 | 0.00099  | 0.00035  | 0.00019  |
| 13840 | 1886.54 | 124.5 | 3.50 | 0.30  | 0.0267 | 0.0418 | 23.99 | 1.692 | -3.903 | 3.1299 | -0.01129 | 0.03319 | -0.04020 | -0.00361 | 0.01060 | -0.01284 | -0.00004 | -0.00006 | 0.00032  |
| 13841 | 1888.85 | 123.8 | 3.51 | 0.29  | 0.0250 | 0.0426 | 24.11 | 1.691 | -3.772 | 3.1327 | -0.01084 | 0.03398 | -0.04038 | -0.00346 | 0.01085 | -0.01289 | 0.00011  | 0.00019  | 0.00028  |
| 13842 | 1887.98 | 124.4 | 3.51 | 0.29  | 0.0243 | 0.0423 | 24.24 | 1.691 | -3.646 | 3.1316 | -0.00885 | 0.03332 | -0.04023 | -0.00283 | 0.01064 | -0.01285 | 0.00074  | -0.00002 | 0.00032  |
| 13843 | 1887.41 | 124.9 | 3.50 | 0.29  | 0.0243 | 0.0451 | 24.37 | 1.691 | -3.520 | 3.1301 | -0.00942 | 0.03388 | -0.04141 | -0.00301 | 0.01082 | -0.01323 | 0.00056  | 0.00016  | -0.00006 |
| 13844 | 1886.54 | 124.6 | 3.50 | 0.30  | 0.0236 | 0.0401 | 24.49 | 1.691 | -3.398 | 3.1293 | -0.01103 | 0.03435 | -0.03955 | -0.00353 | 0.01098 | -0.01264 | 0.00004  | 0.00031  | 0.00053  |
| 13845 | 1889.28 | 123.5 | 3.52 | 0.30  | 0.0243 | 0.0460 | 24.61 | 1.691 | -3.274 | 3.1331 | -0.00820 | 0.03597 | -0.03844 | -0.00262 | 0.01148 | -0.01227 | 0.00095  | 0.00082  | 0.00090  |
| 13846 | 1888.70 | 123.9 | 3.51 | 0.30  | 0.0260 | 0.0479 | 24.74 | 1.692 | -3.149 | 3.1331 | -0.00971 | 0.03560 | -0.04215 | -0.00310 | 0.01136 | -0.01345 | 0.00047  | 0.00070  | -0.00029 |
| 13847 | 1887.55 | 124.7 | 3.50 | 0.29  | 0.0202 | 0.0512 | 24.86 | 1.691 | -3.012 | 3.1308 | -0.00947 | 0.03694 | -0.04067 | -0.00302 | 0.01180 | -0.01299 | 0.00054  | 0.00114  | 0.00018  |
| 13848 | 1886.83 | 124.6 | 3.50 | 0.29  | 0.0246 | 0.0472 | 24.99 | 1.691 | -2.897 | 3.1300 | -0.00885 | 0.03474 | -0.04095 | -0.00283 | 0.01110 | -0.01308 | 0.00074  | 0.00044  | 0.00008  |
| 13849 | 1889.14 | 123.6 | 3.51 | 0.29  | 0.0205 | 0.0486 | 25.11 | 1.691 | -2.763 | 3.1339 | -0.00816 | 0.03414 | -0.04078 | -0.00260 | 0.01028 | -0.01301 | 0.00096  | -0.00038 | 0.00015  |
| 13850 | 1888.13 | 123.9 | 3.51 | 0.28  | 0.0185 | 0.0493 | 25.24 | 1.690 | -2.630 | 3.1327 | -0.00867 | 0.03067 | -0.04088 | -0.00277 | 0.00979 | -0.01305 | 0.00080  | -0.00087 | 0.00012  |
| 13851 | 1888.99 | 123.7 | 3.51 | 0.29  | 0.0198 | 0.0528 | 25.36 | 1.691 | -2.518 | 3.1329 | -0.01245 | 0.03336 | -0.04085 | -0.00397 | 0.01065 | -0.01304 | -0.00041 | -0.00001 | 0.00013  |
| 13852 | 1888.13 | 124.5 | 3.50 | 0.29  | 0.0167 | 0.0623 | 25.49 | 1.691 | -2.387 | 3.1307 | -0.01145 | 0.03525 | -0.03950 | -0.00366 | 0.01126 | -0.01262 | -0.00009 | 0.00060  | 0.00055  |
| 13853 | 1887.41 | 124.9 | 3.50 | 0.29  | 0.0212 | 0.0583 | 25.62 | 1.691 | -2.262 | 3.1311 | -0.01089 | 0.03612 | -0.04165 | -0.00348 | 0.01153 | -0.01330 | 0.00009  | 0.00087  | -0.00014 |
| 13854 | 1886.54 | 124.4 | 3.50 | 0.30  | 0.0229 | 0.0602 | 25.74 | 1.691 | -2.147 | 3.1306 | -0.01016 | 0.03883 | -0.04173 | -0.00325 | 0.01240 | -0.01333 | 0.00032  | 0.00174  | -0.00016 |
| 13855 | 1888.99 | 123.5 | 3.51 | 0.28  | 0.0181 | 0.0640 | 25.86 | 1.690 | -2.009 | 3.1340 | -0.00793 | 0.04113 | -0.03899 | -0.00253 | 0.01312 | -0.01244 | 0.00104  | 0.00246  | 0.00072  |
| 13856 | 1889.14 | 123.9 | 3.51 | 0.27  | 0.0195 | 0.0610 | 25.99 | 1.690 | -1.872 | 3.1325 | -0.00506 | 0.04348 | -0.03701 | -0.00161 | 0.01388 | -0.01182 | 0.00195  | 0.00322  | 0.00135  |
| 13857 | 1888.42 | 123.9 | 3.51 | 0.27  | 0.0154 | 0.0578 | 26.11 | 1.690 | -1.748 | 3.1316 | -0.00158 | 0.03826 | -0.03707 | -0.00050 | 0.01222 | -0.01184 | 0.00306  | 0.00155  | 0.00133  |
| 13858 | 1887.70 | 124.7 | 3.50 | 0.29  | 0.0219 | 0.0596 | 26.24 | 1.691 | -1.639 | 3.1313 | -0.00476 | 0.03414 | -0.03875 | -0.00152 | 0.01090 | -0.01237 | 0.00205  | 0.00024  | 0.00079  |
| 13859 | 1886.98 | 124.9 | 3.50 | 0.28  | 0.0198 | 0.0538 | 26.36 | 1.690 | -1.507 | 3.1293 | -0.00654 | 0.03398 | -0.03978 | -0.00209 | 0.01086 | -0.01271 | 0.00148  | 0.00020  | 0.00045  |
| 13860 | 1889.14 | 124.0 | 3.51 | 0.28  | 0.0153 | 0.0569 | 26.49 | 1.690 | -1.372 | 3.1333 | -0.01026 | 0.02910 | -0.04183 | -0.00328 | 0.00929 | -0.01335 | 0.00029  | -0.00137 | -0.00019 |
| 13861 | 1888.42 | 124.1 | 3.51 | 0.29  | 0.0208 | 0.0543 | 26.61 | 1.691 | -1.268 | 3.1333 | -0.01344 | 0.02966 | -0.04284 | -0.00429 | 0.00947 | -0.01367 | -0.00072 | -0.00119 | -0.00051 |
| 13862 | 1887.98 | 124.8 | 3.50 | 0.29  | 0.0202 | 0.0521 | 26.74 | 1.691 | -1.140 | 3.1317 | -0.01419 | 0.03634 | -0.03990 | -0.00453 | 0.01160 | -0.01274 | -0.00096 | 0.00094  | 0.00042  |
| 13863 | 1886.83 | 124.8 | 3.50 | 0.29  | 0.0198 | 0.0520 | 26.86 | 1.691 | -1.015 | 3.1302 | -0.01146 | 0.04197 | -0.03787 | -0.00366 | 0.01341 | -0.01210 | -0.00009 | 0.00275  | 0.00107  |
| 13864 | 1889.71 | 123.8 | 3.51 | 0.30  | 0.0215 | 0.0547 | 26.99 | 1.692 | -0.902 | 3.1341 | -0.00681 | 0.04535 | -0.03513 | -0.00217 | 0.01447 | -0.01121 | 0.00139  | 0.00381  | 0.00196  |
| 13865 | 1888.85 | 123.7 | 3.51 | 0.28  | 0.0201 | 0.0577 | 27.11 | 1.690 | -0.754 | 3.1335 | -0.00264 | 0.04442 | -0.03445 | -0.00084 | 0.01418 | -0.01099 | 0.00273  | 0.00351  | 0.00217  |
| 13866 | 1886.83 | 124.3 | 3.50 | 0.29  | 0.0198 | 0.0566 | 27.24 | 1.691 | -0.637 | 3.1306 | -0.00011 | 0.04136 | -0.03436 | -0.00003 | 0.01321 | -0.01098 | 0.00353  | 0.00255  | 0.00219  |
| 13867 | 1888.27 | 124.3 | 3.51 | 0.28  | 0.0195 | 0.0629 | 27.36 | 1.690 | -0.503 | 3.1317 | -0.00184 | 0.03793 | -0.03496 | -0.00059 | 0.01211 | -0.01116 | 0.00298  | 0.00145  | 0.00200  |
| 13868 | 1887.70 | 124.8 | 3.50 | 0.28  | 0.0198 | 0.0575 | 27.49 | 1.690 | -0.379 | 3.1306 | -0.00433 | 0.03503 | -0.03667 | -0.00138 | 0.01119 | -0.01171 | 0.00218  | 0.00053  | 0.00145  |
| 13869 | 1888.13 | 124.2 | 3.51 | 0.28  | 0.0184 | 0.0577 | 27.61 | 1.690 | -0.255 | 3.1335 | -0.00870 | 0.03058 | -0.04139 | -0.00278 | 0.00976 | -0.01321 | 0.00079  | -0.00090 | -0.00004 |
| 13870 | 1888.42 | 123.7 | 3.51 | 0.28  | 0.0191 | 0.0562 | 27.74 | 1.690 | -0.130 | 3.1316 | -0.00924 | 0.03183 | -0.04038 | -0.00295 | 0.01016 | -0.01289 | 0.00062  | -0.00050 | 0.00027  |
| 13871 | 1888.13 | 124.3 | 3.51 | 0.28  | 0.0202 | 0.0503 | 27.86 | 1.690 | -0.006 | 3.1323 | -0.01422 | 0.03514 | -0.04368 | -0.00454 | 0.01122 | -0.01394 | -0.00097 | 0.00056  | -0.00078 |
| 13872 | 1888.56 | 124.2 | 3.51 | 0.28  | 0.0232 | 0.0510 | 27.86 | 1.691 | -0.012 | 3.1324 | -0.01164 | 0.03578 | -0.04380 |          |         |          |          |          |          |

Table A24. Continued.

Run = 203

M = 1.60

xsppos = 42.349

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c  |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|---------|
| 13892 | 1888.85 | 124.0 | 3.51 | 0.31  | 0.0232 | 0.0566 | 30.36 | 1.692 | 2.468  | 3.1325 | -0.00159 | 0.04343 | -0.02932 | -0.00051 | 0.01386 | -0.00936 | 0.00306  | 0.00320  | 0.00381 |
| 13893 | 1887.98 | 124.1 | 3.51 | 0.30  | 0.0287 | 0.0503 | 30.49 | 1.692 | 2.597  | 3.1319 | -0.00295 | 0.04441 | -0.02893 | -0.00094 | 0.01418 | -0.00924 | 0.00263  | 0.00352  | 0.00393 |
| 13894 | 1887.98 | 124.7 | 3.50 | 0.29  | 0.0243 | 0.0572 | 30.73 | 1.691 | 2.844  | 3.1315 | -0.00179 | 0.04377 | -0.02870 | -0.00057 | 0.01398 | -0.00916 | 0.00300  | 0.00332  | 0.00400 |
| 13895 | 1887.41 | 125.0 | 3.50 | 0.29  | 0.0239 | 0.0533 | 30.74 | 1.691 | 2.859  | 3.1308 | -0.00153 | 0.04369 | -0.03004 | -0.00049 | 0.01395 | -0.00960 | 0.00308  | 0.00329  | 0.00357 |
| 13896 | 1886.98 | 124.7 | 3.50 | 0.30  | 0.0209 | 0.0572 | 30.86 | 1.691 | 2.977  | 3.1308 | -0.00315 | 0.04132 | -0.03101 | -0.00101 | 0.01320 | -0.00990 | 0.00256  | 0.00254  | 0.00326 |
| 13897 | 1888.99 | 123.6 | 3.51 | 0.31  | 0.0243 | 0.0553 | 30.99 | 1.692 | 3.092  | 3.1345 | -0.00367 | 0.04241 | -0.03006 | -0.00117 | 0.01353 | -0.00959 | 0.00240  | 0.00287  | 0.00358 |
| 13898 | 1888.42 | 124.0 | 3.51 | 0.28  | 0.0243 | 0.0506 | 31.11 | 1.691 | 3.238  | 3.1315 | -0.00117 | 0.04498 | -0.02929 | -0.00037 | 0.01436 | -0.00935 | 0.00320  | 0.00370  | 0.00381 |
| 13899 | 1887.41 | 124.5 | 3.50 | 0.30  | 0.0250 | 0.0529 | 31.24 | 1.692 | 3.352  | 3.1314 | -0.00299 | 0.04337 | -0.03073 | -0.00096 | 0.01385 | -0.00981 | 0.00261  | 0.00319  | 0.00335 |
| 13900 | 1886.83 | 124.4 | 3.50 | 0.29  | 0.0226 | 0.0507 | 31.36 | 1.691 | 3.483  | 3.1306 | -0.00093 | 0.04384 | -0.03154 | -0.00030 | 0.01400 | -0.01007 | 0.00327  | 0.00334  | 0.00309 |
| 13901 | 1888.99 | 123.8 | 3.51 | 0.30  | 0.0256 | 0.0458 | 31.49 | 1.692 | 3.593  | 3.1331 | 0.00075  | 0.04592 | -0.03019 | 0.00024  | 0.01466 | -0.00964 | 0.00381  | 0.00399  | 0.00353 |
| 13902 | 1887.98 | 124.4 | 3.51 | 0.30  | 0.0267 | 0.0492 | 31.61 | 1.692 | 3.721  | 3.1317 | 0.00022  | 0.04561 | -0.03033 | 0.00007  | 0.01456 | -0.00969 | 0.00364  | 0.00390  | 0.00348 |
| 13903 | 1887.41 | 124.9 | 3.50 | 0.29  | 0.0243 | 0.0581 | 31.74 | 1.691 | 3.854  | 3.1313 | 0.00033  | 0.04589 | -0.03158 | 0.00010  | 0.01466 | -0.01009 | 0.00367  | 0.00400  | 0.00308 |
| 13904 | 1886.54 | 124.6 | 3.50 | 0.27  | 0.0236 | 0.0615 | 31.86 | 1.690 | 3.995  | 3.1299 | 0.00025  | 0.04324 | -0.03156 | 0.00008  | 0.01381 | -0.01008 | 0.00365  | 0.00315  | 0.00308 |
| 13905 | 1889.28 | 123.6 | 3.51 | 0.30  | 0.0242 | 0.0665 | 31.99 | 1.692 | 4.100  | 3.1326 | 0.00098  | 0.04605 | -0.02906 | 0.00031  | 0.01470 | -0.00928 | 0.00388  | 0.00404  | 0.00389 |
| 13906 | 1887.98 | 124.3 | 3.51 | 0.28  | 0.0239 | 0.0617 | 32.11 | 1.691 | 4.236  | 3.1298 | 0.00004  | 0.04438 | -0.02865 | 0.00001  | 0.01418 | -0.00915 | 0.00358  | 0.00352  | 0.00401 |
| 13907 | 1887.41 | 124.9 | 3.50 | 0.28  | 0.0246 | 0.0537 | 32.24 | 1.691 | 4.363  | 3.1299 | -0.00197 | 0.04563 | -0.02868 | -0.00063 | 0.01458 | -0.00916 | 0.00294  | 0.00392  | 0.00400 |
| 13908 | 1886.98 | 124.6 | 3.50 | 0.29  | 0.0267 | 0.0464 | 32.36 | 1.691 | 4.479  | 3.1302 | -0.00124 | 0.04606 | -0.02886 | -0.00040 | 0.01471 | -0.00922 | 0.00317  | 0.00405  | 0.00394 |
| 13909 | 1887.84 | 124.8 | 3.50 | 0.27  | 0.0274 | 0.0403 | 32.49 | 1.691 | 4.622  | 3.1317 | -0.00119 | 0.04808 | -0.02799 | -0.00038 | 0.01535 | -0.00894 | 0.00319  | 0.00469  | 0.00423 |
| 13910 | 1887.41 | 125.1 | 3.50 | 0.27  | 0.0243 | 0.0442 | 32.65 | 1.690 | 4.778  | 3.1299 | 0.00283  | 0.04551 | -0.02658 | 0.00090  | 0.01598 | -0.00849 | 0.00447  | 0.00532  | 0.00467 |
| 13911 | 1886.69 | 124.9 | 3.50 | 0.27  | 0.0239 | 0.0542 | 32.74 | 1.690 | 4.874  | 3.1300 | 0.00251  | 0.04987 | -0.02757 | 0.00080  | 0.01593 | -0.00881 | 0.00437  | 0.00527  | 0.00436 |
| 13912 | 1888.70 | 123.9 | 3.51 | 0.27  | 0.0270 | 0.0503 | 32.87 | 1.690 | 5.000  | 3.1314 | 0.00581  | 0.04886 | -0.02663 | 0.00186  | 0.01560 | -0.00850 | 0.00542  | 0.00494  | 0.00466 |
| 13913 | 1887.55 | 124.7 | 3.50 | 0.27  | 0.0277 | 0.0470 | 33.00 | 1.691 | 5.124  | 3.1321 | 0.00419  | 0.04655 | -0.02877 | 0.00134  | 0.01486 | -0.00919 | 0.00491  | 0.00420  | 0.00398 |
| 13914 | 1888.99 | 123.7 | 3.51 | 0.27  | 0.0256 | 0.0458 | 33.12 | 1.690 | 5.250  | 3.1332 | 0.00324  | 0.04696 | -0.02811 | 0.00103  | 0.01499 | -0.00897 | 0.00460  | 0.00433  | 0.00419 |
| 13915 | 1888.99 | 124.0 | 3.51 | 0.27  | 0.0270 | 0.0438 | 33.24 | 1.690 | 5.370  | 3.1337 | 0.00222  | 0.04596 | -0.02988 | 0.00071  | 0.01467 | -0.00953 | 0.00428  | 0.00400  | 0.00363 |
| 13916 | 1888.42 | 124.3 | 3.51 | 0.27  | 0.0263 | 0.0509 | 33.39 | 1.690 | 5.517  | 3.1335 | 0.00023  | 0.04551 | -0.02832 | 0.00007  | 0.01452 | -0.00904 | 0.00364  | 0.00386  | 0.00413 |
| 13917 | 1887.70 | 125.1 | 3.50 | 0.27  | 0.0284 | 0.0473 | 33.49 | 1.691 | 5.616  | 3.1302 | 0.00060  | 0.04746 | -0.02804 | 0.00019  | 0.01516 | -0.00896 | 0.00376  | 0.00450  | 0.00421 |
| 13918 | 1889.14 | 123.8 | 3.51 | 0.26  | 0.0246 | 0.0555 | 33.62 | 1.690 | 5.755  | 3.1337 | 0.00009  | 0.04461 | -0.02403 | 0.00003  | 0.01424 | -0.00767 | 0.00360  | 0.00358  | 0.00550 |
| 13919 | 1888.13 | 124.0 | 3.51 | 0.27  | 0.0232 | 0.0547 | 33.74 | 1.690 | 5.871  | 3.1318 | -0.00006 | 0.04582 | -0.02288 | -0.00002 | 0.01463 | -0.00731 | 0.00355  | 0.00397  | 0.00586 |
| 13920 | 1887.55 | 124.9 | 3.50 | 0.29  | 0.0253 | 0.0540 | 33.86 | 1.691 | 5.984  | 3.1313 | -0.00010 | 0.04771 | -0.02440 | -0.00003 | 0.01524 | -0.00779 | 0.00354  | 0.00458  | 0.00537 |
| 13921 | 1886.69 | 124.7 | 3.50 | 0.28  | 0.0233 | 0.0557 | 33.99 | 1.690 | 6.116  | 3.1300 | 0.00034  | 0.04763 | -0.02318 | 0.00011  | 0.01522 | -0.00740 | 0.00368  | 0.00455  | 0.00576 |
| 13922 | 1889.14 | 123.8 | 3.51 | 0.28  | 0.0215 | 0.0528 | 34.11 | 1.691 | 6.239  | 3.1332 | 0.00195  | 0.05028 | -0.02438 | 0.00062  | 0.01605 | -0.00778 | 0.00419  | 0.00539  | 0.00538 |
| 13923 | 1888.13 | 124.2 | 3.51 | 0.28  | 0.0263 | 0.0509 | 34.24 | 1.691 | 6.367  | 3.1313 | 0.00427  | 0.05119 | -0.02402 | 0.00137  | 0.01635 | -0.00767 | 0.00493  | 0.00568  | 0.00550 |
| 13924 | 1887.55 | 124.8 | 3.50 | 0.28  | 0.0267 | 0.0511 | 34.36 | 1.691 | 6.487  | 3.1304 | 0.00464  | 0.05230 | -0.02469 | 0.00148  | 0.01671 | -0.00789 | 0.00505  | 0.00605  | 0.00528 |
| 13925 | 1886.83 | 124.6 | 3.50 | 0.28  | 0.0219 | 0.0475 | 34.49 | 1.690 | 6.618  | 3.1299 | 0.00409  | 0.05172 | -0.02498 | 0.00131  | 0.01652 | -0.00798 | 0.00488  | 0.00586  | 0.00519 |
| 13926 | 1888.85 | 123.8 | 3.51 | 0.28  | 0.0195 | 0.0657 | 34.61 | 1.690 | 6.745  | 3.1326 | 0.00491  | 0.05348 | -0.02602 | 0.00157  | 0.01707 | -0.00831 | 0.00514  | 0.00641  | 0.00486 |
| 13927 | 1888.13 | 124.4 | 3.51 | 0.28  | 0.0232 | 0.0622 | 34.74 | 1.690 | 6.867  | 3.1318 | 0.00570  | 0.05276 | -0.02653 | 0.00182  | 0.01685 | -0.00847 | 0.00539  | 0.00618  | 0.00470 |
| 13928 | 1887.70 | 124.9 | 3.50 | 0.27  | 0.0164 | 0.0659 | 34.86 | 1.690 | 7.004  | 3.1311 | 0.00556  | 0.05139 | -0.02744 | 0.00178  | 0.01641 | -0.00876 | 0.00534  | 0.00575  | 0.00440 |
| 13929 | 1886.69 | 124.6 | 3.50 | 0.27  | 0.0219 | 0.0643 | 34.99 | 1.690 | 7.122  | 3.1304 | 0.00788  | 0.05137 | -0.02640 | 0.00252  | 0.01641 | -0.00843 | 0.00609  | 0.00575  | 0.00473 |
| 13930 | 1888.99 | 123.7 | 3.51 | 0.28  | 0.0243 | 0.0581 | 35.11 | 1.691 | 7.237  | 3.1331 | 0.00746  | 0.05541 | -0.02278 | 0.00238  | 0.01769 | -0.00727 | 0.00595  | 0.00702  | 0.00590 |
| 13931 | 1887.98 | 124.4 | 3.51 | 0.27  | 0.0181 | 0.0584 | 35.24 | 1.690 | 7.377  | 3.1318 | 0.00490  | 0.05109 | -0.02249 | 0.00156  | 0.01631 | -0.00718 | 0.00513  | 0.00565  | 0.00598 |
| 13932 | 1887.41 | 125.0 | 3.50 | 0.27  | 0.0195 | 0.0620 | 35.36 | 1.690 | 7.503  | 3.1295 | 0.00820  | 0.05498 | -0.01979 | 0.00262  | 0.01757 | -0.00632 | 0.00619  | 0.00691  | 0.00684 |
| 13933 | 1886.83 | 124.7 | 3.50 | 0.27  | 0.0174 | 0.0656 | 35.49 | 1.690 | 7.629  | 3.1303 | 0.00621  | 0.04903 | -0.02300 | 0.00198  | 0.01566 | -0.00735 | 0.00555  | 0.00500  | 0.00582 |
| 13934 | 1888.70 | 123.8 | 3.51 | 0.27  | 0.0164 | 0.0668 | 35.61 | 1.690 | 7.749  | 3.1337 | 0.00524  | 0.04629 | -0.02418 | 0.00167  | 0.01477 | -0.00772 | 0.00524  | 0.00411  | 0.00545 |
| 13935 | 1888.56 | 124.0 | 3.51 | 0.26  | 0.0184 | 0.0605 | 35.74 | 1.689 | 7.886  | 3.1326 | 0.00410  | 0.04396 | -0.02075 | 0.00131  | 0.01403 | -0.00662 | 0.00488  | 0.00337  | 0.00654 |
| 13936 | 1887.41 | 124.6 | 3.50 | 0.26  | 0.0195 | 0.0648 | 35.86 | 1.689 | 8.010  | 3.1309 | 0.00172  | 0.04274 | -0.02263 | 0.00055  | 0.01365 | -0.00723 | 0.00412  | 0.00299  | 0.00594 |
| 13937 | 1886.98 | 124.7 | 3.50 | 0.27  | 0.0212 | 0.0714 | 35.98 | 1.690 | 8.121  | 3.1298 | -0.00010 | 0.04247 | -0.01865 | -0.00003 | 0.01357 | -0.00596 | 0.00354  | 0.00291  | 0.00721 |
| 13938 | 1888.99 | 123.9 | 3.51 | 0.26  | 0.0167 | 0.0744 | 36.11 | 1.689 | 8.259  | 3.1336 | -0.00425 | 0.03758 | -0.02236 | -0.00136 | 0.01199 | -0.00714 | 0.00221  | 0.00133  | 0.00603 |
| 13939 | 1888.42 | 124.0 | 3.51 | 0.26  | 0.0188 | 0.0663 | 36.24 | 1.690 | 8.381  | 3.1316 | -0.00426 | 0.03919 | -0.01806 | -0.00136 | 0.01251 | -0.00577 | 0.00221  | 0.00185  | 0.00740 |
| 13940 | 1887.41 | 124.7 | 3.50 | 0.26  | 0.0160 | 0.0685 | 36.36 | 1.689 | 8.510  | 3.1309 | -0.00981 | 0.03410 | -0.01915 | -0.00313 | 0.01089 | -0.00612 | 0.00043  | 0.00023  | 0.00705 |
| 13941 | 1887.12 | 124.8 | 3.50 | 0.26  | 0.0184 | 0.0708 | 36.49 | 1.690 | 8.631  | 3.1300 | -0.00840 | 0.03262 | -0.02019 | -0.00268 | 0.01042 | -0.00645 | 0.00088  | -0.00024 | 0.00672 |
| 13942 | 1889.14 | 124.1 | 3.51 | 0.27  | 0.0188 | 0.0681 | 36.61 | 1.690 | 8.752  | 3.1331 | -0.00825 | 0.03176 | -0.02167 | -0.00263 | 0.01014 | -0.00692 | 0.00094  | -0.00052 | 0.00625 |
| 13943 | 1888.27 | 124.1 | 3.51 | 0.27  | 0.0171 | 0.0690 | 36.74 | 1.690 | 8.880  | 3.1317 | -0.01371 | 0.02260 | -0.02515 | -0.00438 | 0.00722 | -0.00803 | -0.00081 | -0.00344 | 0.00514 |
| 13944 | 1887.84 | 124.7 | 3.50 | 0.27  | 0.0164 | 0.0649 | 36.86 | 1.690 | 9.007  | 3.1320 | -0.01895 | 0.01621 | -0.02761 | -0.00605 | 0.00518 | -0.00882 | -0.00248 | -0.00549 | 0.00435 |
| 13945 | 1886.98 | 125.0 | 3.50 | 0.28  | 0.0202 | 0.0615 |       |       |        |        |          |         |          |          |         |          |          |          |         |

Table A24. Concluded.

Run = 203

M = 1.60

xsppos = 42.350

| point | p0      | t0    | rnft | alpha | cnmrc  | cmmrc  | x     | h/L   | xhbeta | pref   | dp01     | dp02    | dp03     | dpp01    | dpp02   | dpp03    | dpp01c   | dpp02c   | dpp03c   |
|-------|---------|-------|------|-------|--------|--------|-------|-------|--------|--------|----------|---------|----------|----------|---------|----------|----------|----------|----------|
| 13965 | 1887.41 | 124.9 | 3.50 | 0.28  | 0.0229 | 0.0592 | 39.49 | 1.691 | 11.612 | 3.1302 | -0.01855 | 0.02429 | -0.06287 | -0.00592 | 0.00776 | -0.02009 | -0.00236 | -0.00290 | -0.00692 |
| 13966 | 1888.42 | 124.3 | 3.51 | 0.28  | 0.0253 | 0.0512 | 39.61 | 1.691 | 11.738 | 3.1331 | -0.01473 | 0.02696 | -0.06230 | -0.00470 | 0.00861 | -0.01988 | -0.00113 | -0.00205 | -0.00672 |
| 13967 | 1888.70 | 123.9 | 3.51 | 0.28  | 0.0243 | 0.0590 | 39.74 | 1.691 | 11.863 | 3.1332 | -0.01349 | 0.02833 | -0.05983 | -0.00431 | 0.00904 | -0.01909 | -0.00074 | -0.00162 | -0.00593 |
| 13968 | 1887.98 | 124.6 | 3.50 | 0.27  | 0.0229 | 0.0564 | 39.86 | 1.690 | 11.999 | 3.1328 | -0.01401 | 0.03252 | -0.05935 | -0.00447 | 0.01038 | -0.01894 | -0.00090 | -0.00028 | -0.00578 |
| 13969 | 1887.26 | 125.0 | 3.50 | 0.27  | 0.0246 | 0.0546 | 39.99 | 1.690 | 12.120 | 3.1302 | -0.01333 | 0.03291 | -0.05336 | -0.00426 | 0.01052 | -0.01705 | -0.00069 | -0.00015 | -0.00388 |
| 13970 | 1888.85 | 124.2 | 3.51 | 0.29  | 0.0250 | 0.0538 | 40.11 | 1.691 | 12.230 | 3.1334 | -0.01171 | 0.03521 | -0.05077 | -0.00374 | 0.01124 | -0.01620 | -0.00017 | 0.00058  | -0.00304 |
| 13971 | 1888.70 | 124.1 | 3.51 | 0.29  | 0.0229 | 0.0639 | 40.24 | 1.691 | 12.354 | 3.1329 | -0.01048 | 0.03275 | -0.04880 | -0.00335 | 0.01045 | -0.01558 | 0.00022  | -0.00021 | -0.00241 |
| 13972 | 1887.84 | 124.6 | 3.50 | 0.29  | 0.0260 | 0.0619 | 40.36 | 1.691 | 12.477 | 3.1321 | -0.01166 | 0.03182 | -0.04961 | -0.00372 | 0.01016 | -0.01584 | -0.00015 | -0.00050 | -0.00267 |
| 13973 | 1887.12 | 125.0 | 3.50 | 0.27  | 0.0229 | 0.0648 | 40.49 | 1.690 | 12.621 | 3.1306 | -0.01135 | 0.03026 | -0.04936 | -0.00362 | 0.00966 | -0.01577 | -0.00006 | -0.00100 | -0.00260 |
| 13974 | 1887.98 | 124.2 | 3.51 | 0.28  | 0.0215 | 0.0650 | 40.61 | 1.690 | 12.743 | 3.1341 | -0.01070 | 0.02923 | -0.05021 | -0.00341 | 0.00933 | -0.01602 | 0.00015  | -0.00134 | -0.00285 |
| 13975 | 1888.70 | 123.7 | 3.51 | 0.28  | 0.0246 | 0.0620 | 40.74 | 1.691 | 12.863 | 3.1332 | -0.01273 | 0.02835 | -0.05059 | -0.00406 | 0.00905 | -0.01615 | -0.00050 | -0.00161 | -0.00298 |
| 13976 | 1888.13 | 124.5 | 3.50 | 0.29  | 0.0215 | 0.0603 | 40.86 | 1.691 | 12.983 | 3.1318 | -0.01349 | 0.02752 | -0.04900 | -0.00431 | 0.00879 | -0.01565 | -0.00074 | -0.00187 | -0.00248 |
| 13977 | 1887.26 | 125.0 | 3.50 | 0.28  | 0.0246 | 0.0593 | 40.99 | 1.691 | 13.109 | 3.1306 | -0.01566 | 0.02396 | -0.04787 | -0.00500 | 0.00765 | -0.01529 | -0.00143 | -0.00301 | -0.00212 |
| 13978 | 1888.85 | 124.1 | 3.51 | 0.29  | 0.0249 | 0.0631 | 41.11 | 1.691 | 13.228 | 3.1336 | -0.01687 | 0.02245 | -0.04794 | -0.00538 | 0.00717 | -0.01530 | -0.00182 | -0.00350 | -0.00213 |
| 13979 | 1888.56 | 124.0 | 3.51 | 0.28  | 0.0236 | 0.0633 | 41.24 | 1.691 | 13.364 | 3.1328 | -0.01712 | 0.02407 | -0.04786 | -0.00546 | 0.00768 | -0.01528 | -0.00190 | -0.00298 | -0.00211 |
| 13980 | 1887.98 | 124.8 | 3.50 | 0.29  | 0.0239 | 0.0589 | 41.36 | 1.691 | 13.480 | 3.1311 | -0.01790 | 0.02408 | -0.04751 | -0.00572 | 0.00769 | -0.01517 | -0.00215 | -0.00297 | -0.00201 |
| 13981 | 1887.26 | 125.2 | 3.50 | 0.29  | 0.0260 | 0.0572 | 41.49 | 1.691 | 13.606 | 3.1305 | -0.01891 | 0.02710 | -0.04620 | -0.00604 | 0.00866 | -0.01476 | -0.00247 | -0.00200 | -0.00159 |
| 13982 | 1889.42 | 124.1 | 3.51 | 0.28  | 0.0246 | 0.0583 | 41.61 | 1.691 | 13.734 | 3.1339 | -0.01593 | 0.03066 | -0.04533 | -0.00508 | 0.00978 | -0.01446 | -0.00151 | -0.00088 | -0.00130 |
| 13983 | 1888.27 | 124.0 | 3.51 | 0.29  | 0.0263 | 0.0630 | 41.74 | 1.691 | 13.856 | 3.1315 | -0.01188 | 0.03600 | -0.04554 | -0.00379 | 0.01150 | -0.01022 | 0.00083  | 0.00083  | -0.00138 |
| 13984 | 1887.84 | 124.6 | 3.50 | 0.27  | 0.0236 | 0.0643 | 41.86 | 1.690 | 13.994 | 3.1318 | -0.00948 | 0.03225 | -0.04576 | -0.00303 | 0.01030 | -0.01461 | 0.00054  | -0.00036 | -0.00145 |
| 13985 | 1887.12 | 124.9 | 3.50 | 0.28  | 0.0229 | 0.0611 | 41.99 | 1.691 | 14.112 | 3.1304 | -0.00857 | 0.03183 | -0.04783 | -0.00274 | 0.01017 | -0.01528 | 0.00083  | -0.00049 | -0.00211 |
| 13986 | 1889.14 | 123.8 | 3.51 | 0.28  | 0.0253 | 0.0577 | 42.11 | 1.691 | 14.237 | 3.1338 | -0.01157 | 0.02807 | -0.04717 | -0.00369 | 0.00896 | -0.01505 | -0.00012 | -0.00171 | -0.00188 |
| 13987 | 1888.42 | 124.2 | 3.51 | 0.27  | 0.0239 | 0.0579 | 42.24 | 1.690 | 14.373 | 3.1321 | -0.01326 | 0.02618 | -0.04890 | -0.00423 | 0.00836 | -0.01561 | -0.00067 | -0.00230 | -0.00245 |
| 13988 | 1887.84 | 124.8 | 3.50 | 0.28  | 0.0232 | 0.0576 | 42.37 | 1.690 | 14.495 | 3.1318 | -0.01609 | 0.02416 | -0.05063 | -0.00514 | 0.00772 | -0.01617 | -0.00157 | -0.00295 | -0.00300 |
| 13989 | 1886.98 | 125.2 | 3.50 | 0.28  | 0.0222 | 0.0505 | 42.49 | 1.690 | 14.620 | 3.1298 | -0.01681 | 0.02778 | -0.04902 | -0.00537 | 0.00888 | -0.01566 | -0.00180 | -0.00178 | -0.00250 |
| 13990 | 1889.28 | 124.0 | 3.51 | 0.27  | 0.0277 | 0.0534 | 42.61 | 1.690 | 14.743 | 3.1338 | -0.01778 | 0.03315 | -0.04824 | -0.00567 | 0.01058 | -0.01539 | -0.00211 | -0.00008 | -0.00223 |
| 13991 | 1888.13 | 124.1 | 3.51 | 0.28  | 0.0243 | 0.0553 | 42.74 | 1.691 | 14.867 | 3.1321 | -0.01259 | 0.03607 | -0.04303 | -0.00402 | 0.01152 | -0.01374 | -0.00045 | 0.00085  | -0.00057 |
| 13992 | 1887.70 | 124.9 | 3.50 | 0.28  | 0.0236 | 0.0596 | 42.86 | 1.691 | 14.991 | 3.1304 | -0.00932 | 0.03725 | -0.04153 | -0.00298 | 0.01190 | -0.01327 | 0.00059  | 0.00124  | -0.00010 |
| 13993 | 1886.83 | 124.9 | 3.50 | 0.28  | 0.0212 | 0.0648 | 42.99 | 1.690 | 15.119 | 3.1295 | -0.00691 | 0.03830 | -0.04067 | -0.00221 | 0.01224 | -0.01300 | 0.00136  | 0.00158  | 0.00017  |
| 13994 | 1889.14 | 123.8 | 3.51 | 0.29  | 0.0218 | 0.0661 | 43.11 | 1.691 | 15.234 | 3.1343 | -0.00658 | 0.03696 | -0.04347 | -0.00210 | 0.01179 | -0.01387 | 0.00147  | 0.00113  | -0.00070 |
| 13995 | 1888.42 | 124.1 | 3.51 | 0.30  | 0.0277 | 0.0563 | 43.24 | 1.692 | 15.347 | 3.1320 | -0.00740 | 0.03612 | -0.04395 | -0.00236 | 0.01153 | -0.01403 | 0.00120  | 0.00087  | -0.00087 |
| 13996 | 1887.55 | 124.8 | 3.50 | 0.29  | 0.0232 | 0.0613 | 43.36 | 1.691 | 15.483 | 3.1305 | -0.00705 | 0.03684 | -0.04632 | -0.00225 | 0.01177 | -0.01480 | 0.00132  | 0.00111  | -0.00163 |
| 13997 | 1886.54 | 124.9 | 3.50 | 0.28  | 0.0219 | 0.0615 | 43.49 | 1.691 | 15.616 | 3.1300 | -0.00853 | 0.03484 | -0.04919 | -0.00272 | 0.01113 | -0.01572 | 0.00084  | 0.00047  | -0.00255 |
| 13998 | 1888.70 | 123.6 | 3.51 | 0.28  | 0.0201 | 0.0568 | 43.61 | 1.691 | 15.742 | 3.1327 | -0.00802 | 0.03401 | -0.04864 | -0.00256 | 0.01086 | -0.01553 | 0.00101  | 0.00020  | -0.00236 |
| 13999 | 1888.27 | 124.3 | 3.51 | 0.29  | 0.0250 | 0.0566 | 43.74 | 1.691 | 15.859 | 3.1324 | -0.00995 | 0.03370 | -0.04777 | -0.00318 | 0.01076 | -0.01525 | 0.00039  | 0.00010  | -0.00209 |
| 14000 | 1887.26 | 124.8 | 3.50 | 0.28  | 0.0226 | 0.0674 | 43.87 | 1.690 | 15.996 | 3.1310 | -0.00943 | 0.03344 | -0.04304 | -0.00301 | 0.01068 | -0.01375 | 0.00055  | 0.00002  | -0.00058 |
| 14001 | 1887.98 | 124.3 | 3.51 | 0.27  | 0.0250 | 0.0594 | 43.99 | 1.690 | 16.125 | 3.1338 | -0.01221 | 0.03281 | -0.04024 | -0.00390 | 0.01047 | -0.01284 | -0.00033 | -0.00019 | 0.00032  |
| 14002 | 1888.85 | 123.9 | 3.51 | 0.27  | 0.0215 | 0.0659 | 44.11 | 1.690 | 16.253 | 3.1335 | -0.01058 | 0.03348 | -0.03967 | -0.00338 | 0.01068 | -0.01266 | 0.00019  | 0.00002  | 0.00050  |
| 14003 | 1887.70 | 124.7 | 3.50 | 0.26  | 0.0202 | 0.0624 | 44.24 | 1.690 | 16.383 | 3.1315 | -0.01163 | 0.03467 | -0.03637 | -0.00371 | 0.01107 | -0.01161 | -0.00015 | 0.00041  | 0.00155  |
| 14004 | 1887.41 | 125.0 | 3.50 | 0.26  | 0.0229 | 0.0667 | 44.36 | 1.690 | 16.506 | 3.1308 | -0.01073 | 0.03502 | -0.03610 | -0.00343 | 0.01119 | -0.01153 | 0.00014  | 0.00053  | 0.00163  |
| 14005 | 1887.12 | 124.4 | 3.50 | 0.27  | 0.0215 | 0.0641 | 44.49 | 1.690 | 16.621 | 3.1318 | -0.01061 | 0.03402 | -0.03780 | -0.00339 | 0.01086 | -0.01207 | 0.00018  | 0.00020  | 0.00110  |
| 14006 | 1888.42 | 123.8 | 3.51 | 0.26  | 0.0215 | 0.0622 | 44.61 | 1.690 | 16.758 | 3.1329 | -0.01106 | 0.03404 | -0.03714 | -0.00353 | 0.01087 | -0.01185 | 0.00004  | 0.00020  | 0.00131  |
| 14007 | 1887.98 | 124.6 | 3.50 | 0.26  | 0.0167 | 0.0689 | 44.74 | 1.689 | 16.888 | 3.1309 | -0.01029 | 0.03585 | -0.03608 | -0.00329 | 0.01145 | -0.01152 | 0.00028  | 0.00079  | 0.00164  |
| 14008 | 1887.12 | 125.0 | 3.50 | 0.26  | 0.0226 | 0.0619 | 44.86 | 1.690 | 17.008 | 3.1298 | -0.00981 | 0.03494 | -0.03818 | -0.00313 | 0.01116 | -0.01220 | 0.00043  | 0.00050  | 0.00097  |
| 14009 | 1886.83 | 124.5 | 3.50 | 0.26  | 0.0222 | 0.0635 | 44.99 | 1.690 | 17.130 | 3.1307 | -0.01016 | 0.03588 | -0.03953 | -0.00325 | 0.01146 | -0.01263 | 0.00032  | 0.00080  | 0.00054  |
| 14010 | 1888.85 | 123.8 | 3.51 | 0.26  | 0.0205 | 0.0644 | 45.11 | 1.689 | 17.262 | 3.1337 | -0.01015 | 0.03494 | -0.03848 | -0.00324 | 0.01115 | -0.01228 | 0.00033  | 0.00049  | 0.00089  |
| 14011 | 1888.27 | 124.4 | 3.51 | 0.26  | 0.0246 | 0.0574 | 45.24 | 1.690 | 17.381 | 3.1318 | -0.01033 | 0.03595 | -0.03707 | -0.00330 | 0.01148 | -0.01184 | 0.00027  | 0.00082  | 0.00133  |
| 14012 | 1887.26 | 124.8 | 3.50 | 0.27  | 0.0226 | 0.0591 | 45.37 | 1.690 | 17.502 | 3.1302 | -0.00991 | 0.03454 | -0.03923 | -0.00316 | 0.01103 | -0.01253 | 0.00040  | 0.00037  | 0.00063  |
| 14013 | 1887.55 | 124.1 | 3.51 | 0.26  | 0.0202 | 0.0605 | 45.49 | 1.689 | 17.634 | 3.1314 | -0.01200 | 0.03552 | -0.03861 | -0.00383 | 0.01134 | -0.01233 | -0.00026 | 0.00068  | 0.00083  |
| 14014 | 1888.70 | 123.7 | 3.51 | 0.26  | 0.0225 | 0.0646 | 45.61 | 1.690 | 17.757 | 3.1329 | -0.01066 | 0.03555 | -0.03818 | -0.00340 | 0.01135 | -0.01219 | 0.00017  | 0.00068  | 0.00098  |
| 14015 | 1887.84 | 124.5 | 3.50 | 0.27  | 0.0232 | 0.0576 | 45.74 | 1.690 | 17.876 | 3.1317 | -0.01005 | 0.03561 | -0.03891 | -0.00321 | 0.01137 | -0.01243 | 0.00036  | 0.00071  | 0.00074  |

## Appendix B

### Sublimation Tests to Determine Boundary Layer Transition Grit Size and Location

A brief study was conducted near the end of the wind tunnel test to determine a boundary layer transition grit size and location that would ensure the model boundary layer was turbulent. Sublimation was used to determine the boundary layer state. The sublimation runs were conducted at a Mach number of 1.60 and a free-stream unit Reynolds number of 3.5 million per foot with the model set to  $0.26^\circ$  angle of attack.

Initial boundary layer grit sizing was performed using the method of reference 7 except that a critical roughness Reynolds number of 1800 was used instead of the recommended 600. The increase in critical roughness Reynolds number was needed to properly account for the effect of Mach number as shown in figure 8 of reference 8.

The transition grit strips consisted of sand grit sparsely sprinkled in a lacquer film. During the sublimation runs, the transition grit strips on the wing had two approximately 0.25 in. wide sections where the grit was removed so that the effect of no grit could be visualized. The two sections without grit split the wing into approximately three even sections, i.e., the 0.25 in. wide sections with no grit were located at about  $1/3$  and  $2/3$  of the distance from the fuselage to the wing tip.

The sublimation chemical used during these tests was fluorene ( $C_{13}H_{10}$ ). The fluorene was dissolved in a type of freon called Genesolv 2004 (1,1,2-trichloro- 1,2,2-trifluoroethane) and applied to the model with a pressurized spray gun. The mixture ratio of the sublimation chemicals was 35 g fluorene to 2 qt of Genesolv 2004.

The basic procedure used during the sublimation runs consisted of the following:

1. Apply grit to the model.
2. Apply sublimation chemical to the model with a pressurized spray gun.
3. Start tunnel flow.
4. Obtain first sublimation photograph when stagnation pressure reached approximately 75 percent of the set point condition.
5. Obtain sublimation photograph every 4-5 minutes until the end of the sublimation run.
6. Increase tunnel temperature to  $175^\circ\text{F}$  to remove the fluorene that remained on the model after completion of the run.

The sublimation runs were conducted while the reference and survey probes were mounted to the solid test section door. Photographs were obtained with two digital cameras mounted in the other test section door that contained the schlieren windows. The cameras were mounted side by side between one set of schlieren window support bars. The model blade sting positioned the model approximately 5 inches from the rotation axis of the tunnel roll coupling. Therefore, as the model was rolled from  $-90^\circ$  (viewing top surface of model) to  $90^\circ$  (viewing bottom surface of model) the distance from the tunnel side wall where the cameras were located changed by approximately 10 in. The large difference in focusing distance required the use of two cameras. Two flash units were located above the cameras and two were located below the cameras to illuminate the model for the photographs.

A brief description of each sublimation run and the result is presented below. Five sublimation runs were attempted although only four were successful. During the first sublimation run, which



was unsuccessful, the sublimation chemicals were applied too thinly and thus sublimed before the tunnel test conditions were set.

#### Second sublimation run (run 178)

- #50 grit on right-hand side of nose only;  $\approx 5.0$  in. from nose measured along model surface; strip approx. 0.125 in. wide

During this run, the model was rolled from  $-90^\circ$  to  $90^\circ$  every 4-5 minutes so that photographs of the top and bottom surface of the model were obtained throughout the entire run.

Sample sublimation photographs of the model upper surface are shown in figure B1. The results from this run showed that the boundary layer on both the right- and left-hand wings did not transition to turbulent flow.

#### Third sublimation run (run 183)

- #50 grit on model nose;  $\approx 5.0$  in. from nose measured along model surface; strip approx. 0.125 in. wide
- #80 grit on right-hand wing; 0.4 in. measured perpendicular to wing leading edge
- #60 grit on left-hand wing; 0.4 in. measured perpendicular to wing leading edge
- Grit strips on wings approx. 0.125 in. wide measured perpendicular to wing leading edge

During this run, the model was rolled  $-90^\circ$  (viewing top surface of model) for the entire run and then it was roll to  $90^\circ$  for a final photograph of the bottom surface at the end of the run.

The grit was applied 0.4 in. measured perpendicular to the wing leading edge rather than 0.4 in. measured streamwise from the wing leading edge. Consequently, the grit was located at nearly 50 percent chord for most of the wing rather than near the wing leading edge.

Sample sublimation photographs of the model upper surface are shown in figure B2. The #50 grit transition strip on the nose did not appear to transition the flow on the fuselage.

The sublimation results showed that both the #60 and #80 grit partially transitioned the boundary layer on the outboard sections of the wing but did not on the inboard sections of the wing.

#### Fourth sublimation run (run 186)

- #50 grit on model nose;  $\approx 5.0$  in. from nose measured along model surface; strip approx. 0.125 in. wide
- #80 grit on right-hand wing; 0.4 in. measured streamwise from wing leading edge
- #60 grit on left-hand wing; 0.4 in. measured streamwise from wing leading edge
- Grit strips on wings approx. 0.125 in. wide measured perpendicular to wing leading edge

During this run, the model was rolled  $-90^\circ$  (viewing top surface of model) for the entire run and then it was roll to  $90^\circ$  for a final photograph of the bottom surface at the end of the run.

Sample sublimation photographs of the model upper surface are shown in figure B3. The #50 grit transition strip on the nose did not appear to transition the flow on the fuselage.

The sublimation results showed that the #80 and #60 grit transitioned the boundary layer on the outboard sections of the wing. Neither grit size was effective in transitioning the boundary layer on the inboard section of the wing.

The grit strips on the wing were approximately 0.125 in. wide measured perpendicular to the wing leading edge which is the normal Langley Unitary Plan Wind Tunnel procedure. However, because the wing sweep on the model was so large, the effective width of the strip as viewed along a streamline was much larger. Therefore, it is believed that the grit strip would appear to the flow as a two dimensional step and consequently be less effective in causing transition to turbulent flow.

#### Fifth sublimation run (run 189)

- #50 grit on model nose;  $\approx 5.0$  in. from nose measured along model surface; strip approx. 0.125 in. wide
- #50 grit on model nose;  $\approx 7.5$  in. from nose measured along model surface; strip approx. 0.125 in. wide
- #80 grit on outboard 2/3 of right-hand wing; 0.4 in. measured streamwise from wing leading edge
- #50 grit on inboard 1/3 of right-hand wing; 0.4 in. measured streamwise from wing leading edge
- #60 grit on left-hand wing; 0.4 in. measured streamwise from wing leading edge
- Grit strips on wings approx. 0.063 in. wide measured streamwise from wing leading edge

During this run, the model was rolled  $-90^\circ$  (viewing top surface of model) for the entire run and then it was roll to  $90^\circ$  for a final photograph of the bottom surface at the end of the run.

A second transition strip was applied to the model nose in an attempt to trip the fuselage boundary layer. The grit on the model wings was applied in a much narrower strip as compared to the run 186 application in order to minimize the two dimensional step affect described previously.

Sample sublimation photographs of the model upper surface are shown in figure B4. The two #50 grit strips on the nose did not appear to transition the flow on the fuselage. Test time limitations prevented further trials of the nose grit to determine a suitable grit size.

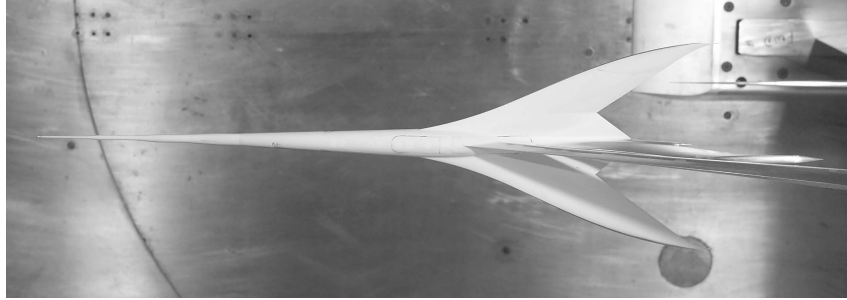
The sublimation results showed that the #80 grit on the outboard right-hand wing was successful in transitioning the boundary layer to turbulent flow. The #50 grit was mostly (but not completely) successful in transitioning the boundary layer on the inboard section of the right-hand wing. The #60 grit was also successful in transitioning the boundary layer on the outboard section of the left-hand wing. However, the #60 grit on the inboard left-hand wing did not appear to transition the flow.

#### Boundary layer grit size and location summary

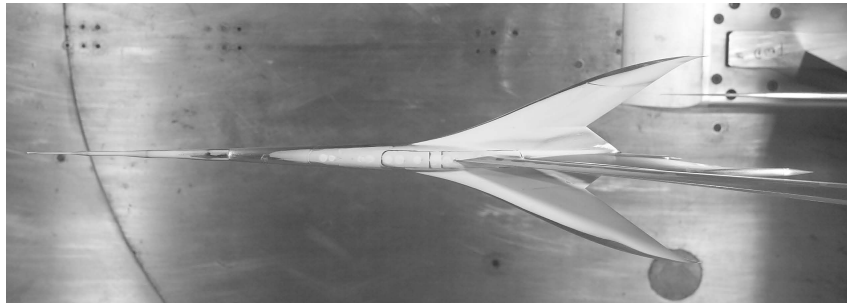
Based on the sublimation runs, the smallest boundary-layer grit size and grit location that transitioned the model wing boundary layer from laminar to turbulent was:

- # 80 grit (0.0077 in.  $\pm$  0.0007 in. nominal size) on outboard 2/3 of wing. The strip was located 0.4 in. aft of the wing leading edge measured streamwise and was approximately 0.063 in. wide (measured streamwise).

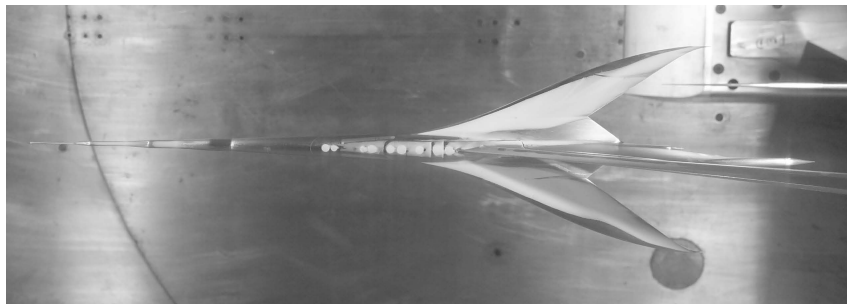
- # 50 grit (0.0128 in.  $\pm$  0.0011 in. nominal size) on inboard 1/3 of wing. The strip was located 0.4 in. aft of the wing leading edge measured streamwise and was approximately 0.063 in. wide (measured streamwise).



(a)  $t = 6$  min.

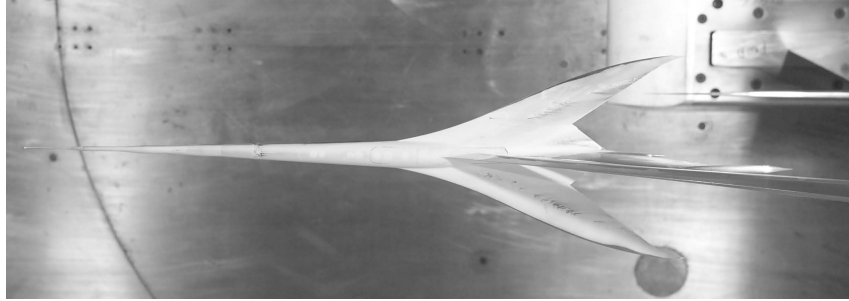


(b)  $t = 21$  min.

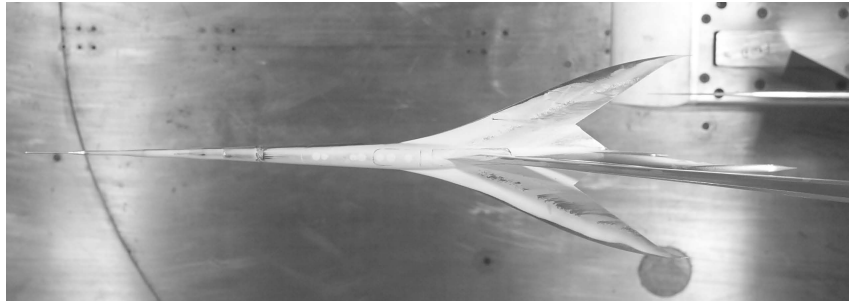


(c)  $t = 31$  min.

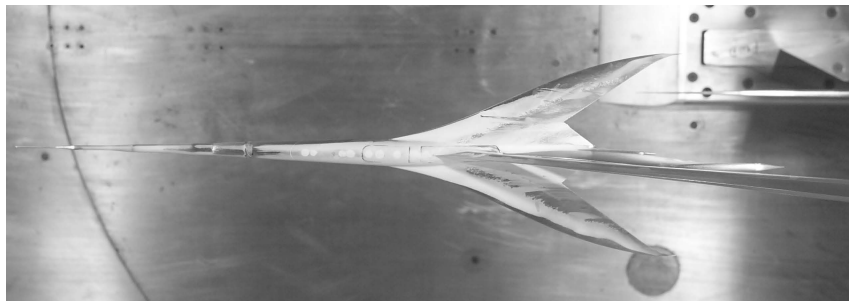
Figure B1. Sublimation photographs of upper surface for run 178 at  $M = 1.60$ .



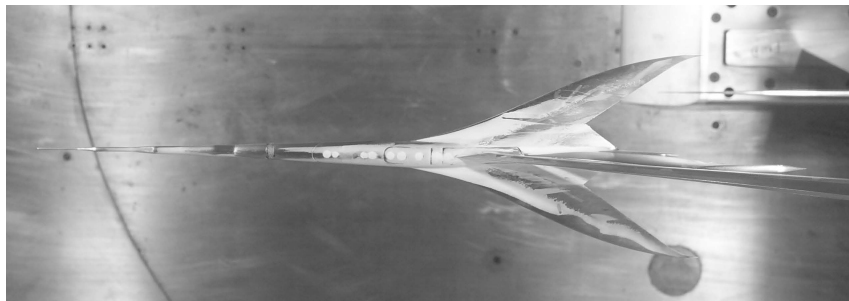
(a)  $t = 0$  min.



(b)  $t = 5$  min.

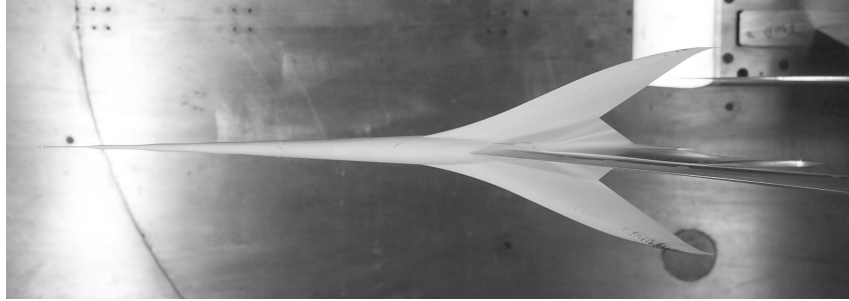


(c)  $t = 10$  min.

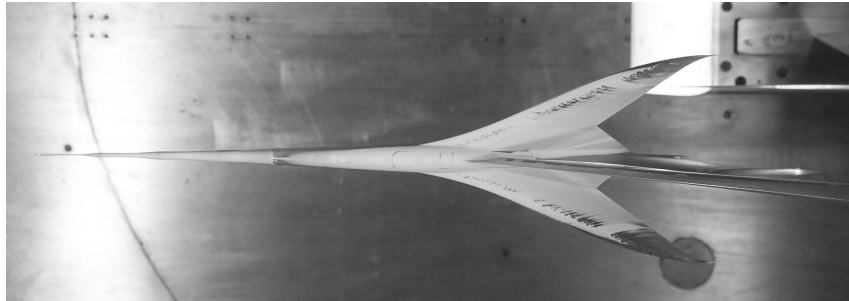


(d)  $t = 15$  min.

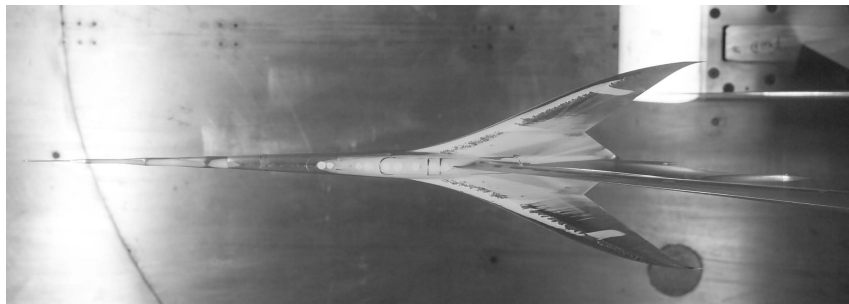
Figure B2. Sublimation photographs of upper surface for run 183 at  $M = 1.60$ .



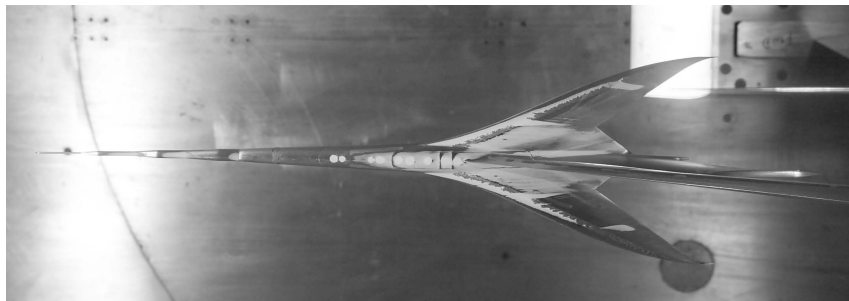
(a)  $t = 0$  min.



(b)  $t = 11$  min.

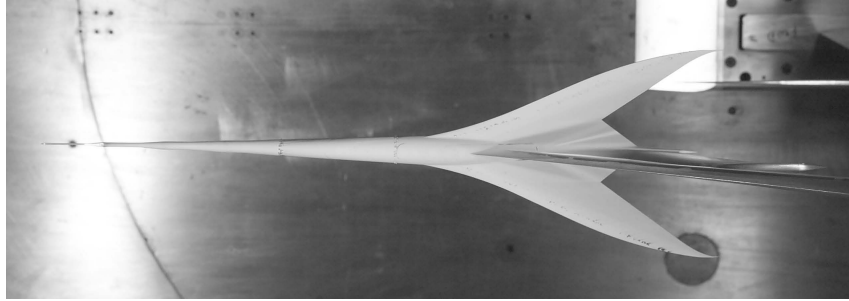


(c)  $t = 23$  min.

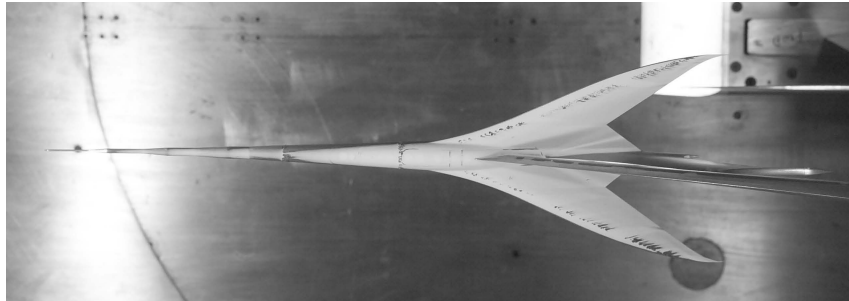


(d)  $t = 31$  min.

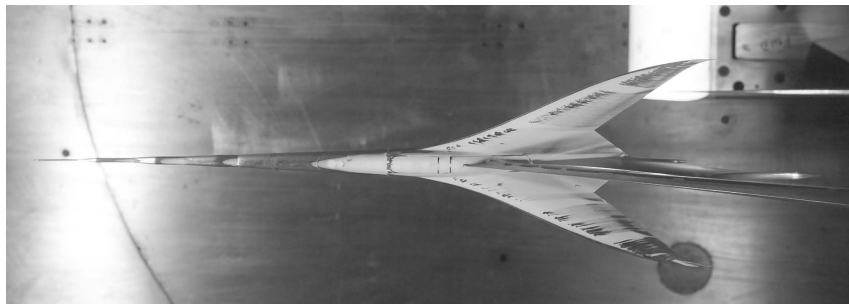
Figure B3. Sublimation photographs of upper surface for run 186 at  $M = 1.60$ .



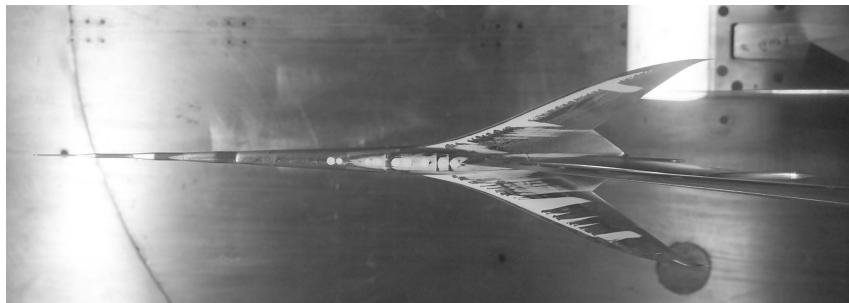
(a)  $t = 0$  min.



(b)  $t = 12$  min.



(c)  $t = 24$  min.



(d)  $t = 40$  min.

Figure B4. Sublimation photographs of upper surface for run 189 at  $M = 1.60$ .

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| 14. ABSTRACT<br>A wind tunnel test has been conducted by Gulfstream Aerospace Corporation (GAC) to measure the sonic boom pressure signature of a low boom Mach 1.6 cruise business jet in the Langley Unitary Plan Wind Tunnel at Mach numbers 1.60 and 1.80. Through a cooperative agreement between GAC and the National Aeronautics and Space Administration (NASA), GAC provided NASA access to some of the experimental data and NASA is publishing these data for the sonic boom research community. On-track and off-track near field sonic boom pressure signatures were acquired at three separation distances (0.5, 1.2, and 1.7 reference body lengths) and three angles of attack ( $-0.26^\circ$ , $0.26^\circ$ , and $0.68^\circ$ ). The model was blade mounted to minimize the sting effects on the sonic boom signatures. Although no extensive data analysis is provided, selected data are plotted to illustrate salient features of the data. All of the experimental sonic boom pressure data are tabulated. Schlieren images of the configuration are also included. |             |                      |                            |   |   |  |
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